

Volume 10

Number 10

March 1944

Rel.

APR 15 1944

Aiding Youthwork in Secondary Schools

Children enter school at an early age and the first years of their lives are spent in the secondary school. It is therefore of great importance that the secondary school should be a place where the child can find a home, a place where he can find a friend, a place where he can find a guide. The secondary school should be a place where the child can find a home, a place where he can find a friend, a place where he can find a guide. The secondary school should be a place where the child can find a home, a place where he can find a friend, a place where he can find a guide.

THE JOURNAL OF THE NATIONAL ASSOCIATION OF YOUTHWORKERS

MAR 17 1944

NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS

of the
NATIONAL EDUCATION ASSOCIATION

OFFICERS

1943-1944

President: HOMER H. STEWART

Principal, Davis High School, Mt. Vernon, New York

Vice President: E. R. JOSE

State High-School Supervisor, Jackson, Mississippi

Second Vice President: WILFRED H. BROWN

Headmaster, Brookline High School, Brookline, Massachusetts

Executive Secretary: PAUL E. BLANCH

1201 Massachusetts Street, N. W., Washington, D. C.

EXECUTIVE COMMITTEE

VIRGIL M. HARRIS

Principal, Flavin and Reed Junior High School, Springfield, Missouri

SAMUEL F. JAMISON

Principal, West Tanager High School, Schenectady, New York

GALEN JONES

Principal, East Orange High School, East Orange, New Jersey

E. W. MONTGOMERY

Superintendent of High Schools and President of Junior College, Phoenix, Arizona

NATIONAL COUNCIL OF THE NATIONAL HONOR SOCIETY

CHARLES FOREST ALLEN, President

Teacher, Washington, D. C.
312 West Second Street, Lima, Ohio, Adjutant

L. W. BROWN

Director, Secondary Education, Public Schools, Wichita, Kansas

M. W. CAROTHERS

Florida State College for Women, Tallahassee, Florida

GEORGE E. BRATTON

Principal, Nevada Free Academy, Nevada, California

A. E. MACQUEEN

Principal, Washburn High School, Minneapolis, Minnesota

JAMES E. MANGRUM

Principal, Upper Darby High School, Upper Darby, Pennsylvania

JAMES E. BLUE

Principal, West Junior High School, Rockford, Illinois

W. L. SPENCER

State Supervisor of Secondary Education, Montgomery, Alabama

PAUL E. BLANCH, Secretary

1201 Massachusetts Street, N. W., Washington, D. C.

Send Eight Dollars a Year

One Dollar Sample

\$1.00 a Year

Monthly, October to May inclusive

Published at Washington, D. C., by the National Association of Secondary
School Principals of the National Education Association

1201 Massachusetts Street, N. W., Washington, D. C.

Entered as second-class matter, November 5, 1935, at the post office at Washington, D. C., and additional mailing at Spring Garden, Illinois, under No. 274,500, Post Office No. 1013, June 1, 1937, authorized at special rate of postage, provided for in Section 1103, Act of February 26, 1943, authorized November 6, 1943.

Textbooks for today

Effective

Sound

Dependable

**Meeting the teacher's
every need**

**American
Book
V... — Company**



New Mathematics Textbooks for Grades 7 and 8

Effective in developing

Power in
Mathematical
Reasoning

A High Degree
of Skill
in Computational
Abilities

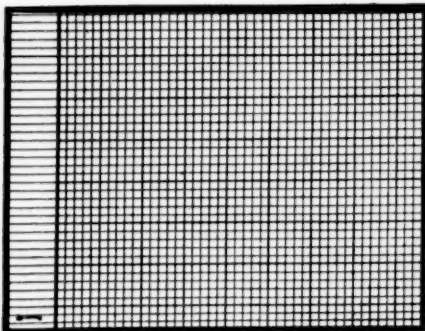
FUNDAMENTAL MATHEMATICS

By Raleigh Schorling, John R. Clark, and Rolland R. Smith

WORLD BOOK COMPANY

Yonkers-on-Hudson 5, New York

2126 Prairie Avenue, Chicago 16



Something New! "PLASTIC-PLATED" GRAPH-CHARTS

50" by 38"
with Metal Eyelets for Hanging

You Write With Wax Crayons and Erase with Dry Cloth

Ruled in one inch squares with every fifth line heavier. Space down left side for names, abacissas, legends, etc. Used in arithmetic, algebra, physics, economics, commercial geography, industrial arts, agriculture, domestic science and for contests, Board of Education meetings, attendance records, etc.

Printed in black on a clear white background.

The transparent plastic surface provides a writing surface of glass-like smoothness on which one may write or draw with wax crayons or tempera or paint with water colors.

The surface can be wiped clean and white with a soft dry cloth as frequently as desired without soiling the hands or clothing. Washable inks can be used and removed with soap and warm water.

They are mounted on $\frac{1}{4}$ " laminated mounting boards and are durably bound with extra heavy tape. The outlines are beneath the plastic surface so they do not wear off.

No. 21 Graph—Plain. Has graph on one side and plain white "plastic plated" surface on other side.

No. 22 Graph—Graph. Has graph charts on both sides.

PRICES—\$6.25 Each plus Transportation
Ideal crayons—Box of 5 colors (best to use) 35c

Dept. B

P. O. Box 2606

Modern School Products

Cleveland, Ohio.

The Bulletin

OF THE NATIONAL ASSOCIATION OF Secondary-School Principals

*A Department of Secondary Education of the
NATIONAL EDUCATION ASSOCIATION
Issued Monthly, October to May Inclusive*

Volume 28

February, 1944

Number 120

Table of Contents

Aiding Youth in Secondary Schools

Continuing Your Education in the Armed Forces	E. E. Lewis	4
Evaluating Military Experience for School Credit	H. C. McElroy	30
Secondary-School Credit for Military Experience	P. E. Elicker	33
Aeronautics Prerequisites	W. L. Wrinkle	35
	H. F. Glidden	
Mississippi Schools in the War Program		44
When a School Goes to War	R. C. Ray	53
Conflicting Theories of Secondary Education in a Time of War	R. L. Pounds	55
The Strategy of Truth	L. O'Connor	64
The National Association of Student Councils		71
Work Experience and Secondary Education	P. B. Jacobson	75
	B. L. Dodds	
That List of Graduates	J. H. Starie	82
Orientation Program for Freshmen	M. Ronalds	84
England's High-School Victory Corps	F. L. Redefers	91
The President is Honored		94
National Contests Approved		95
News Notes		96
The Book Column		103

THE CONTENTS OF THIS BULLETIN ARE LISTED IN "EDUCATION INDEX"

Copyright 1944 by

THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS

PAUL E. ELICKER, Executive Secretary

PAUL E. ELICKER, Editor

WALTER E. HESS, Managing Editor

1201 Sixteenth Street, N. W., Washington 6, D. C.

The squad is the *Basic Unit* in Army organization. The size of the various units is exceedingly elastic. In general, however, the following statements are true for the Army. The terms used in the Navy, Coast Guard, Marine Corps, and the Air Corps are different.

Squad. (4 to 16 privates) Usually 12, but size depends upon the kind of weapons, the use to which the troops will be put. Usually commanded by a Corporal.

Section. (10 to 30 men) (3 squads normally, can be 2 to 4 squads) commanded by a Corporal.

Platoon. (40 to 50 men) (2 sections normally, can be from 2 to 4), usually commanded by a Second or First Lieutenant. Again the number of men and sections in a Platoon depends upon how the men are armed and how they are used.

Company. (150 to 200 men) (At least 2 platoons normally, can be 2 to 4) usually commanded by a Captain.

Battalion. (450 to 800 men) (2 to 4 companies, normally 3 companies plus the headquarters company) usually commanded by a Lieutenant Colonel.

Regiment. (1500 to 3000 men) (2 to 4 battalions, usually 4) commanded by a Colonel.

Brigade. (4500 to 7000 men) (2 to 4 regiments). The Brigade organization is only used in certain branches of the Armed Forces.

Division. (15,000 to 20,000 men) *Triangle* Division is made up of 3 regiments of infantry, 3 separate battalions of field artillery plus special troops, plus services of supply. *Square* Division is made up of 2 Brigades of 2 regiments each. Usually commanded by a Major General.

Corps. (30,000 to 45,000 men) (usually 2 to 4 divisions) usually commanded by a Lieutenant General.

Army. (120,000 to 150,000 men) (at least 2-4 corps) a Lieutenant General usually in command.

Continuing Your Education in the Armed Forces¹ *A Bulletin for Youth 16-20 Years of Age*

E. E. LEWIS

Professor of Education, Ohio State University, Columbus, Ohio

This article is the third in a series published in THE BULLETIN and written by E. E. Lewis, Bureau of Education Research, Ohio State University, for youth 16-20 years of age on essential information used in advising youth about the educational and military opportunities in the Armed Forces.—The Editor.

ARE YOU saying, "Oh Shucks! What's the use. The war's got me or will get me soon. This is the end of my education."

Not by a long shot, fellow! The Armed Services offer you a golden opportunity to get a good education while you are in uniform—perhaps a better education than you would get otherwise. So roll up your sleeves and prepare to *learn* while you serve!

America's Army and Navy are conducting the largest adult school in the world. The Navy alone maintains 566 special schools for the training of technicians. The Army has more than twice that number.

In 1943, eleven of every fourteen able-bodied men between the ages of 18 and 38 (one-ninth of all the adults in the United States) were students in Army and Navy schools. Graduates of these schools were trained for more than a thousand different war jobs.

OURS IS THE MOST EDUCATED ARMY AND NAVY IN THE WORLD

About fourteen per cent of our Armed Forces are college men. Sixty-six per cent have attended high school one or more years and about forty per cent have been graduated from high school.

The Army and Navy wants you to learn all you can BEFORE induction. A large number of all boys becoming 18 years of age will enter the war. Practically all of you should have some technical training while in high

¹Reprints in quantity lots available at nominal rates: 25 copies, \$1.50; 50 copies, \$2.50; 100 copies, \$4.50; 500 copies, \$200.00; 1000 copies, \$35.00. Minimum order accepted 25 copies. Shipping charges post-paid if payment accompanies order.

²The three articles are:

Getting Ready for Induction. THE BULLETIN, October 1943. National Association of Secondary-School Principals. 32 pp. Available in pamphlet form as a reprint.

I Should Stay in School. THE BULLETIN, November 1943. National Association of Secondary-School Principals. 6 pp.

Continuing Your Education in the Armed Forces. THE BULLETIN, February 1944. National Association of Secondary-School Principals. 26 pp. Available in pamphlet form as a reprint as indicated in footnote 1 above.

school. Why? Because the Armed Forces need technicians. In general, *any* mechanical skill and technical knowledge can be used.

More technical training is now offered in this country than in any other country at any time. The future welfare and safety of this country depends upon a high degree of technical training. "So take all the technical training you can get." It is good for war and equally good for peace.

Here is a list of the jobs to which 91.9 per cent of inductees were assigned in 1943. Learn all you can in one of these jobs before you are 18. You will greatly increase your chances of getting a technical rating in the Armed Forces.

JOBS WITH CIVILIAN COUNTERPARTS

Automobile mechanic	Machinist
Baker	Medical technician
Bridge Builder	Motorcyclist
Carpenter, construction	Packing-case maker
Chauffeur	Parts clerk, automobile
Chief clerk	Radio operator
Clerk, general	Radio repairman
Clerk, mail	Receiving or shipping checker
Clerk-typist	Rigger
Construction foreman	Stenographer
Cook	Stock clerk
Electrician	Stock-control clerk
Engineman, operating	Stock-record clerk
Foreman, warehouse	Telephone operator
Highway, construction machine	Teletypewriter operator
Hoist operator	Toolroom keeper
Horse breaker	Tractor driver
Hospital orderly	Truck driver, heavy
Instrument man, surveying	Truck driver, light
Laundry machine operator	Utility repairman
Lineman, telephone and telegraph	Welder combination
Longshoreman	

JOBS NOT DIRECTLY RELATED TO CIVILIAN OCCUPATIONS

Administrative and technical clerk	Antiaircraft machine gunner
Administrative non-commissioned officer	Antitank gunner
Aerial gunner	Armorer
Airplane armorer	Army Air Forces radio mechanic
Airplane electrical specialist	Army Air Forces radio operator and mechanic
Airplane inspector	Army Air Forces technical supply noncommissioned officer
Airplane-instrument specialist	Army airplane and engine mechanic
Airplane-propeller specialist	Artillery mechanic, minor maintenance
Airplane-sheetmetal worker	Automatic rifleman
Ammunition handler	
Ammunition noncommissioned officer	

Automotive equipment mechanic	Munitions worker, aviation
Balloon maneuvering crewman	Operations noncommissioned officer
Basic	Orderly
Bugler	Pack driver
Cannoneer	Parachute rigger and repairman
Chief of section	Personnel noncommissioned officer
Communication chief	Photographic laboratory technician
Demolition specialist	Platoon sergeant
Dental technician	Portable power-generator operator
Duty noncommissioned officer	Radar operator, designate set
Fire-control institute operator	Radio operator, high speed
First-aid man	Radio operator, low speed
First sergeant	Refueling unit operator
Gunner	Rifleman
Half-truck driver	Scout
Heavy machine gunner	Section leader
Instrument observer	Special service school instructor
Laborer	Spotter
Liaison agent	Squad leader
Link-trainer instructor	Supply noncommissioned officer
Litter bearer	Surgical technician
Medical noncommissioned officer	Switchboard operator, local battery
Messenger	Tank gunner
Mess sergeant	Technical instructor
Military policeman	Toxic gas handler
Motorcycle scout	Truckmaster
Motor transportation noncommissioned officer	

This is a power war. In the First World War we had a 3500 horsepower division. In this war we have a 400,000 plus horsepower division. We are making aviation engines today at the rate of 30,000,000 horsepower per month. "This is a power war—power plus."—Charles F. Kettering.

In most previous wars the chief demands were physical fitness, the ability to march long stretches, an eye trained to shoot straight, and the hardiness to endure physical privations. *Technical training was not demanded by the nature of the war.* This war demands skills and skills and skills! An untrained man cannot run an airplane, a tank, or a submarine. To have sent *that kind* of a soldier to fight Rommel's Afrika Corps or to capture Guadalcanal would have been murder. *To man a battleship with men like that would lose the ship.*

The men it takes to operate the machines on "one" large battleship represent at least 1500 aggregate years of training and 2500 years of experience.

In this mechanized war, *brawn* is still needed but *brawn* alone is not enough. A trained *brain* is absolutely necessary. A man must use his *head* as well as his hands and feet. He must be able to take over and "go it alone," if and when necessary. Usually he must work in close harmony with his own and other technical units. Alertness and technical ability are at a premium.

When you are inducted, you don't quit going to school. *You just change from one kind of a school to another.* Practically every branch of the Armed Forces has a Service School. *Two out of three jobs in the Armed Forces are equally useful in civilian life after the war is over.* Thus you will be able to carry over much of your Army or Navy education to your civilian life.

Are you planning for the future? Remember, the future belongs to those who prepare for it. Your best insurance for a job after the war is to be trained while in the war. "*How*" you say, "*can I do this?*" *It is just what I want to do, but I don't know how.*"

FIRST. HAVE A PURPOSE. Do whatever service you may be assigned, *apply for training—go to school.* Be grateful for the chance. If you are not interested in the branch to which you are assigned, *make yourself interested.* You're in now. Make the most of it.

Nothing that you learn is wasted. It all increases your adaptability. The ignorant man can only do a few tricks along one line. The educated man can follow a thousand trades and learn a new one whenever he needs to do so.

The first obligation of school youth is to take advantage of their educational opportunities in order that they may be better prepared for citizenship and for service to the nation.—U. S. Office of Education.

SECOND. THINK! Some men won't think enough. They won't read enough. They won't study enough. They loaf and waste hours of valuable time. Later they wonder why they didn't get ahead. Some men will come out of the Army where they went in, or even behind where they went in.

Make your education a continuous process. Go to school "*before*" you are inducted. Go to school "*after*" you are inducted.

THIRD. REMEMBER THIS. *Interest follows attention!* No matter to what branch you are assigned, give it the best you've got. Nine chances out of ten you will get interested in it. You can get an excellent education in this way. The job itself will teach you things you never dreamed you would learn.

FOURTH. IT'S UP TO YOU. The Army will give you every opportunity to learn but in the final analysis, it's up to you. You must do it yourself. Keep your mind tuned up. Read and study to get ahead. If it doesn't seem to be of any value now, it may be of great value to you later in civilian life.

The Army and Navy have the largest single "Library System" in the world. Your government has bought ten million books for leisure-time reading and is planning to buy 35 million more. These books are for your use. Self-study is the key to success.

EDUCATIONAL OPPORTUNITIES FOR YOU

When I am a soldier or a sailor, how can I go to school?

As soon as you have completed basic training in the Army or "boot" training in the Navy, you can enroll for educational courses in the U. S. Armed Forces Institute.

What courses are offered by the U. S. Armed Forces Institute?

It is an official War Department School, operated jointly by the Army and the Navy, for service men and women in *all* branches of the Armed



Use your off-duty hours to further your education and to receive credit toward a high-school diploma or for a college degree after discharge from Service.

Forces. Wherever you are in this country or overseas, you can study courses through the Institute. Headquarters are at Madison 3, Wisconsin, and there are branches of the Institute overseas.

What courses are offered by the U. S. Armed Forces Institute?

Practically anything you want to learn. The Institute itself offers more than sixty high-school and technical correspondence and self-teaching courses. Through eighty-two co-operating colleges and universities you have your chance to study more than seven hundred additional courses. Courses studied by college extension carry full academic credit if you complete them satisfactorily. Some fields of study are: English, social studies, mathematics, science, business, engineering, and agriculture.

How may I enroll in the Institute?

Get from your Orientation or Education Officer, or the military organization librarian, the official Institute enrollment blank and catalog (or write direct to Institute Headquarters, Madison 3, Wisconsin). Fill out this application, get your Commanding Officer's approval on it, then mail it direct to the Institute with your money order for \$2.00. Make the money order payable to the *Treasurer of the United States*.

How can I enroll for the university extension courses?

You select your course and choose your college from the listing in the catalog of the U. S. Armed Forces Institute. Then fill out the Institute application blank and mail it to Institute Headquarters at Madison 3, Wisconsin. The Institute will advise you as to the cost of the course you have chosen. The government will pay half the cost up to \$20.00 for a single course. For example, if the course costs \$40.00, the government pays \$20.00 and you pay \$20.00.

What more should I know about studying in the U. S. Armed Forces Institute?

1. For the Institute courses you pay an initial fee of \$2.00, payable when you enroll. You then may study as many Institute courses as you like as long as your work is satisfactory.

2. You enroll for only one course at a time, but there is no limit to the number of courses you may take.

3. You mail your lessons in each course, as you complete them, directly to the U. S. Armed Forces Institute, Madison 3, Wisconsin, or, if you are overseas, to your nearest Institute overseas branch. Competent instructors review your lessons, make suggestions, and grade your work.

4. Unless your military duties intervene, you are expected to submit at least one lesson each month.

Do I have to be a high-school graduate?

No. You must be in Uncle Sam's Service. You may take any high-school course you wish and finish your high-school education, or you may study to improve a certain technical skill.

How may I get school or college credit for these courses?

Complete them satisfactorily and take the tests given by the U. S. Armed Forces Institute for these courses and get a competence rating.

Will the school or college accept these ratings and give one credit toward graduation?

In nearly all cases, yes, if your ratings are high enough and satisfactory to the school or college.

What kind of tests are there?

There are four kinds of tests:

1. *End-of-course Tests* for Institute courses. For many courses there are end-of-course tests which are available for all who enroll in the courses. These tests are for the use of the student only.

2. *Field Tests*. Institute tests which cover a complete subject, such as physics. These are generally acceptable to schools and colleges for granting you credit, because they are complete and thoroughly standardized.

3. *General Educational Development Tests*. Comprehensive objective tests covering five major fields: English composition, social studies, sciences, mathematics, and English literature. There are two groups of tests: one to show how competent you are as a high-school student; the other, to show how competent you are on a college basis.

4. *Technical Competence Tests*. To measure competency in a few highly technical fields, like Radar. They are for college or university grades only.

Must I take the Institute or college courses before I can take any of these tests?

No. You may take any of them as soon as you think you are competent enough to pass them, upon payment of the regular registration fee of \$2.00.

At the time the individual is discharged from the Armed Forces, the U. S. Armed Forces Institute will make available to the educational institutions a "competence profile" of the returning serviceman including his full military and previous educational record and his scores in a battery of tests of general educational competence to enable the high school or college to effect an appropriate educational placement. This request must be made by the serviceman in ample time for the U. S. Armed Forces Institute to complete this service.

Are there other ways I can study for these tests?

Yes. There are many classes formed in many subjects, with regular instructors in many places throughout the world. They are held during your off-duty hours. You can also obtain self-teaching texts from the U. S. Armed Forces Institute.

HOW TO BECOME A NONCOMMISSIONED OFFICER IN THE ARMED SERVICES

The Army

The War Department recently changed its method of ranking technicians. The old system of specialists was dropped and in its place we now have three new grades for enlisted men.—Technician 3rd Grade, 4th Grade, and 5th Grade. Men of these grades are noncommissioned officers and wear chevrons similar to those of other noncoms of equal rank with a "T" (for technician) just below the stripes. With technician rating goes higher pay.

What is a noncom or noncommissioned officer in the Army?

A noncom is in rank and pay above a private but below a commissioned officer. He must salute all commissioned and warrant officers, but does not rate salutes from enlisted personnel.

The main job of the noncommissioned officer is to supervise men of lower rank directly under the general guidance of commissioned officers. A private, first class, is not a noncommissioned officer. *Noncommissioned officers are of two ranks—corporal and sergeant.*

Corporal. A month after you start your basic training you may be made a lance or temporary corporal in charge of a squad, the basic unit in the Army. This temporary rank does not increase pay. A squad varies in size from 4 to 16 men, depending on the branch and the duties it will be assigned.

Under corporal rank you may also be a technician. The Army gives technician ratings to many trades, such as that of bridge builder, camera repairman, cashier, chauffeur, chemical engineer, or any one of about 400 other necessary jobs. As a technician you wear the chevrons of your rank with a "T" under the chevrons. The less skilled technician jobs are designated, Technician 5th Grade, and carry the rank of corporal.

Sergeant. There are many different kinds of sergeants—First or Master Sergeant, Mess Sergeant, Supply Sergeant, Staff Sergeant, and others. Men with high technical skills win the rating of Sergeant Technician 3rd or 4th grade.

A mechanized Army cannot be supplied or maintained without technicians. Technicians are in the key places when battles are fought. They must be trained. They must be taught to supply, operate, and maintain the most intricate, deadly, and expensive machines ever devised.

The base pay of any enlisted noncommissioned man is increased 20 per cent for any period of foreign service or sea duty, 50 per cent for regular flight service, and \$100 additional per month for regular parachute duty under orders.

What is the pay for noncommissioned men in the Army?

U. S. Army Pay Table, June 1, 1943. Under Pay Readjustment Act of 1942.

Private, \$50.00



Private, First-class
6th grade
\$54.00

Technician
3rd grade
\$96.00



Technician
5th grade
\$66.00

Staff Sergeant
3rd grade
\$96.00



Corporal
5th grade
\$66.00

Technical Sergeant
2nd grade
\$114.00



Technician
4th grade
\$78.00

First Sergeant
2nd grade
\$138.00



Sergeant
4th grade
\$78.00

Master Technical
Sergeant
1st grade
\$138.00



Do I have to be a high-school graduate to obtain a technician's rating?

No. But if you have finished high school and also have worked in a radio repair shop, know amateur photography, auto mechanics, or some other skilled trade, you naturally have a better chance.

When you are inducted you take tests to determine your technical abilities and skills. If there is a need for your particular skill you may be chosen at any time to go to school for further training or assigned directly to a position where these abilities and skills will be of service to the Army.

The best opportunities for additional training as well as advancement will probably go to men with some mechanical, electrical, and engineering skills and abilities. For any additional technical training you may be sent to a Service School of the branch of the Armed Forces to which you are assigned.

Is there any other rank below commissioned officer for which I can prepare?

Yes. Warrant officer which ranks above all noncommissioned officers and below the commissioned officers. Usually warrant officers are specialists in some Army occupation such as mine-planter service, Army finance, band leadership, or office management. Warrant officers are chosen on the basis of examinations given at the Post where you are stationed. Inquire of your commanding officer. The requirements are:

1. Must have been in the Army 3 months.
2. Must be between 18 and 45 years of age.
3. Must score 110 or better on *Army General Classification Test*.
4. Must meet same physical requirements as commissioned officers.
5. Must have approval of your company and regiment officers.

Since the tests for warrant officer are admittedly tough, the War Department advises its preliminary testing boards to use the following standards to determine whether you have the necessary background; in addition to a requirement of high-school graduation, the board recommends completion of 2 years of attendance at a relevant technical school.

1. You are expected before taking warrant officer tests to have had at least six months—preferably a year—of related military experience.
2. For these tests you are expected to have completed some formal schooling in the specific field for which you apply.
3. You must have had six months of trade experience in the particular field (for certain type of Army work, not all).

Pay. A warrant officer (Junior Grade) is paid the salary of a second lieutenant. A chief warrant officer receives the pay of a first lieutenant. Both rate a salute.

The Navy

What are the noncommissioned ranks in the Navy?

Entrance into the Navy is largely by voluntary enlistment. However, at the time of induction you may be given a chance to choose between the Army and the Navy. Thus far promotion in the Navy has been rapid. After four months of total service, the Apprentice Seaman (corresponding to private in the Army) rises to the title of Second Class Seaman or Third Class Fireman, and his salary goes up to \$54 per month. The highest noncommissioned rank in the Navy is that of Chief Petty Officer, \$138 per month.

It is possible to enlist directly in Petty Officer rating if you have certain qualifications of technical skills which the Navy especially desires.

Here is a listing of the age requirement for the Petty Officer group: Petty Officer, Third Class, over 20; Second Class, over 23; First Class, over 26; Chief Petty Officer, over 30.

While on sea duty or overseas service you get a 20 per cent increase in base pay. Men on submarine duty get from \$5 to \$30 extra each month. Listening on a submarine brings \$2 more. Deep sea divers get \$30 a month extra plus \$5 an hour for dives beyond depths of 90 feet.





Aviation duty involving flying pays 50 per cent of base pay in addition. Enlisted men detailed as mess men receive \$5 a month extra. Men detailed as mail clerks receive from \$10 to \$30 extra per month.

What do Warrant Officers in the Navy do?

One of the most important links in the chain of naval personnel is the warrant officer. He is a specialist in some particular branch of naval work. The captain of a ship will probably be more particular in the choice of a warrant officer than in the choice of a lieutenant. Reason: the warrant officer is the link between the officers and men. He is the man who sees that the work of a section gets done. Under him are the petty officers and the noncommissioned men. Over him are the commissioned officers. A warrant officer holds a "warrant" to his job (but a Chief Warrant Officer holds a commission. This may sound curious, but that's how it is).

In peacetime in the Navy a man must serve five years before becoming eligible for appointment as a warrant officer. However, the expansion of our naval forces from 300,000 to over two million make it necessary to shorten the period of experience and training.

What is the pay for noncommissioned men in the navy?

GRADE	RATING	BASE PAY MONTHLY
7	Bugler, Second Class Nonrated Man, Third Class (except Fireman, Third Class) Mess Attendant, Third Class	\$ 50.00
6	Nonrated man, Second Class (except Fireman, Second Class and Musician, Second Class) Fireman, Third Class Mess Attendant, Second Class	54.00
5	Nonrated man, First Class (except Fireman, First Class and Musicians, First Class) Fireman, Second Class Musician, Second Class	66.00
	Mess Attendant, First Class Bugler, First Class	
	4 Petty Officer, Third Class Fireman, First Class Officers Steward, Third Class Officers Cook, Third Class Gunner's Mate, Third Class	76.00
	3 Petty Officer, Second Class Officers Steward, Second Class Officers Cook, Second Class Machinist's Mate, Second Class Musician, First Class	96.00
	2 Petty Officer, First Class Officers Steward, First Class Officers Cook, First Class Carpenter's Mate, First Class	114.00
	1 Chief Petty Officer (permanent appointment) Chief Boatswain's Mate	138.00
	1-A Chief Petty Officer (acting appointment) Officers Chief Steward Officers Chief Cook	126.00

The Marine Corps

The Marine is a combination of sailor and soldier. He learns how to live aboard ship, march like an infantry man, and fire guns like a coast guardsman. The Marine Corps has barrage balloon units, parachute troops, glider troops, Marine raiders, amphibious tractor battalions, etc. It even has its own complement of newspapermen who accompany the Corps all over the world to record and report actions.

What is the pay of noncommissioned men in the Marine Corps?

Ranks and salaries in the Marine Corps are similar to those in the Army.

Private 7th grade \$50.00



Private, First Class
6th grade
\$54.00



Platoon Sergeant
3rd grade
\$96.00



Technician and
Corporal
5th grade
\$66.00



Technical Sergeant
2nd grade
\$114.00



Technician and
Sergeant
4th grade
\$78.00



First Sergeant
2nd grade
\$114.00



Technician and
Staff Sergeant
3rd grade
\$96.00



Master Technical
Sergeant
1st grade
\$138.00

How do I become a noncommissioned officer in the Marine Corps?

Private, 7th Grade: In the Marine Corps, Privates and Privates, First Class, make up the bulk of the fighting forces. When a man enters the Marine Corps, he is appointed a private at once and holds this rank until the day he is qualified to be promoted to the rank of Private, First Class. Instruction for the 7th Pay Grade includes: technique of fire, hand grenade, scouting and patrolling, shelter tents, field sanitation, rifle grenade, automatic rifle, automatic pistol, sentinels, and other units of instruction.

Private, First Class (Line Rank) 6th Pay Grade: Unless otherwise directed by the Commandant of the U. S. Marine Corps, the authorized number of Privates, First Class, cannot exceed 30 per cent of the combined total of Privates, First Class, and Privates. In this 6th Pay Grade other ranks are, Privates, First Class (Technical Rank); Assistant Cook (Mess); Assistant Cook (Baker); and Field Music, First Class.

Corporal (Line Rank) 5th Pay Grade. This 5th Pay Grade also includes Corporal (Technical Rank), Field Cook (Mess); Field Cook (Baker); and Field Music Corporal.

Sergeant (Line Rank) 4th Pay Grade. Includes Sergeant Technical Rank; Mess Sergeant; Chief Cook; Chief Cook (Baker); and Field Music Sergeant.

Platoon Sergeant (Line Rank) 3rd Pay Grade and Staff Sergeant. First Sergeant, Line Rank, 2nd Pay Grade; Gunnery Sergeant; Technical Sergeant; Drum Major; and Supply Sergeant.

Sergeant Major (Line Rank) 1st Pay Grade. Master Gunnery Sergeant (Line Rank); Master Technical Sergeant; Quartermaster Sergeant; and Paymaster Sergeant.

Marines are entitled to extra pay for special work. During flight service, aviators receive 50 per cent of their base pay extra. Paramarines receive \$50 a month extra while parachuting.

*The Coast Guard**How do I become a noncommissioned officer in the Coast Guard?*

The Coast Guard gets its men mostly by voluntary enlistment. Your status on enlistment is that of Apprentice Seaman, pay \$50 per month for shore duty, and \$60 per month for duty afloat or abroad. After 4 months, assuming your record is good, you become a Seaman, Second Class—pay \$54 ashore and \$64.80 afloat or in foreign territory. The next level is Seaman, First Class, the highest non-rated grade in the Seaman Branch—base pay \$66 and \$79.20 afloat or abroad. If you are in the Artificers Branch (Engineers) you may be promoted to Fireman, First Class—base pay \$76 per month, and \$92 afloat or abroad.

Promotion to any one of a number of specialties is now open to you, such as radioman, cook, baker, gunner's mate, and gas and Diesel engineer. If you attain a "speciality" you become Petty Officer, Third Class (noncommissioned) also called "coxswain." \$96 base pay per month.

Next rank is Petty Officer, Second Class—\$114 base pay; Petty Officer, First Class—\$126 base pay; and Chief Petty Officer—\$138 base pay. However you are not called by this rank but by your specialty. For example, a Chief Petty Officer will be a Chief Boatswain's Mate, Chief Machinists' Mate, or Chief Yeoman. These are all noncommissioned ranks. Under each of the Petty Officer ranks there are five branches; seaman, engineers, commissary, aviation, and special. Each of these 5 branches have many specialties for which you may qualify.

If you are a civilian and have never served in the Navy nor been to sea, the names of most of the specialized jobs in the Coast Guard will be strange to you. A Yeoman, for example, generally does some type of office work. A Chief Machinists' Mate in the Coast Guard is an engineer, an expert on Diesel, steam, and gasoline engines. A Carpenter's Mate is not merely a first-class carpenter, he is a plumber as well and he also knows how to work rope and metal hawsers.

A Boatswain's Mate is top hand in the Deck Department, an expert on all phases of seamanship. A Quartermaster in the Coast Guard is an expert helmsman and pilot, whereas a water tender knows all about marine steam boiler installations.

Each member of the Coast Guard is trained to handle a threefold job. He is a seaman, a fighting man, and a technical specialist.

THE COLLEGE TRAINING PROGRAMS

Part I. The Army Specialized Training Programs.

May I go to college or continue in college if I am drafted?

If you show good ability and achievement in the *Army General Classification Tests*, and if you have sufficient academic background, you may be considered for participation in the *Army Specialized Training Program* (ASTP) open to men *after* induction. If you meet certain requirements which will be described in this outline, you may be eligible for the *Army Specialized Training Reserve* (ASTRP) open to men *before* induction and before the age 18. If you want to get into ASTP, be sure you make an excellent record in all tests given at the time of induction and in your basic training.

The purpose of ASTP is to provide a constant and rapid flow of high-grade technicians and specialists needed by the Army. To achieve this purpose qualified soldiers are sent to colleges and universities for terms of prescribed study in fields where the Army's own training facilities are insufficient.

What are the requirements for entrance into ASTP?

1. Soldiers, regardless of age, are eligible if they score at least 115 in the *Army General Classification Test* and have had basic training.

2. *If less than 22 years of age*, you must have had at least a high-school education including prescribed work in mathematics, plus a minimum score of 115 on AGCT² and you must complete basic training.

3. Previous college experience is not necessary. Anyone who has had more than two years of college must have a substantial background in at least one foreign language, or his college work must have included at least one year of physics or mathematics or biology.

The ASTP term is a 12-week period. The number of terms varies according to curriculums. The program is divided into two parts—*Basic* and *Advanced*.

Basic is roughly the equivalent of the first one-and-a-half years of a college course. In general, it is prerequisite to *Advanced* training for all trainees whose previous education falls short of the requirements for that phase. *Basic* covers three 12-week terms.

Advanced opens with courses normally found in the second half of the sophomore year. The average curriculum in the *Advanced* phase covers three 12-week terms. The length of the medical, dental, and veterinary courses are of the approved length for such standard accelerated courses at accredited professional schools. Soldiers in the program are on active duty, under military discipline, and receive regular Army pay.

4. *If 22 years of age or older*, you must have successfully completed at least one year of college, have strong fluency in one or more foreign languages, or your college work must have included a year of mathematics and physics, or a year of biology.

5. Those who have had more than three years of college must have majored in engineering, pre-medicine, or pre-dentistry, or they must have a substantial background in one or more foreign languages.

Eligibility requirements will undergo minor revision from time to time in conformity with the needs of the Army. Precisely how many trainees will be placed in the ASTP at any given time will depend on the needs of the various

²Army General Classification Test.

Arms and Services and the facilities available at accredited colleges and universities with which contacts have been negotiated.

If you are interested in further information on ASTP write for the excellent 20-page bulletin issued by the War Department, called "Essential Facts about the Army Specialized Training Program." It is free. Write, Army Specialized Training Division, A.S.F., The Pentagon, Washington 25, D. C.

What does the ASTP Reserve mean?

The Reserve Program provides Army Specialized Training for qualified 17-year-old high-school graduates *before* they enter the United States Army on active duty. You do not wear a uniform. Young men who are found qualified for the Reserve program are granted military scholarships. Under this scholarship they receive academic instruction in *Basic* courses of ASTP.

Scholarships cover payment by the government of tuition, board and room, and medical service. Reservists are not entitled to Army pay.

While in high school and under 18 years of age, how can I qualify myself for ASTP Reserve and win a military scholarship for ASTP Reserve Training?

In general, as candidate for a military scholarship under the ASTP Reserve Program, you must:

1. Have a high-school education or its equivalent.
2. Be 17 years old and not have reached your 18th birthday prior to en-



Continue your education in some branch of the Service. There are off-duty classes in many subjects.

tering ASTP Reserve Training. At the end of the training term during which you reach your 18th birthday, you would be placed on active military duty and sent to an Army Training Center. On completion of that training you would be screened for continuation in ASTP.

3. Pass the *Qualifying Test*. This test is held every spring and fall in practically all high schools and preparatory schools of the United States. Public announcement is made in advance of the test. If you pass, you will receive a certificate to take with you when you go into military service. See your high-school principal about taking this test.

4. Indicate at the time you take this test whether your choice is Army or Navy. You *cannot change your mind afterwards*?

The aim of the ASTP is to provide a flow of qualified young men for the Armed Forces in specialized areas prior to their entrance into active military duty. In this way, qualified high-school graduates not more than a year below Selective Service age begin immediate preparation for the most advanced military duties.

If I fail to pass the Army-College Qualifying Test, can I take it again?

Yes. If you fail to pass the test, you may take it the next time it is held provided you have not yet reached your 22nd birthday and have been graduated from high school or are in your final term of high school. Also an unsatisfactory score on this test does not exclude you from being considered for ASTP after induction into the Army.

Regardless of whether the Qualifying Test was taken or passed, all soldiers who meet all the other eligibility requirements will be further considered for specialized training under the program.

What do I study at college under ASTP?

The ASTP curriculums include: Chemical Engineering, Civil Engineering, Electrical Engineering (Communications and Power), Mechanical Engineering, Sanitary Engineering, Marine Transportation, Medicine, Dentistry, Veterinary Medicine, Personnel Psychology, Languages, Foreign-Area Study, Surveying, Internal Combustion Engines, Specialization, Basic Communications, Acoustics and Optics, Military and Physical Training. Additional curriculums are in preparation.

The successful soldier-trainee will progress from term to term to the completion of his course. Graduation can take place on successful completion of one or more terms of ASTP work prescribed for the purpose of filling a specific military need. In the majority of cases graduation takes place after the soldier successfully completes one of the following: basic phase, advanced

phase, or any of the special terms designed to fit him for a special type of duty. At the end of every 12-week term, a soldier can be recommended for one of the following: (1) continuation in ASTP; (2) consideration for assignment to Officer's Candidate School; (3) assignment to Army Service Schools; (4) assignment to other military duties.

For more complete answers to questions on ASTP see "Essential Facts About the Army Specialized Training Program." This is a free bulletin published by the Army Specialized Training Division, Army Service Forces, The Pentagon, Washington 25, D. C.

Providing I maintain passing grades, do I get college credit for my training under ASTP?

All ASTP curriculums are at the college undergraduate and graduate level. Accordingly, it is expected that appropriate college credits will be granted enabling the trainee to complete his work for a degree when and if he returns to college as a civilian after the termination of his military service. *A certificate is awarded to the soldier upon successful completion of his prescribed work in the ASTP. Preserve this certificate and present it to the college of your choice.*

Who pays the bill for this ASTP training?

Those selected for ASTP will study at government expense, which includes tuition, fees, and board and room. They will be soldiers on active duty, in uniform, under military discipline, and on regular Army pay. Like any other soldier in the Army, they must serve for the duration of the war plus six months. They are subject to full military discipline. Trainees are organized into companies, battalions, and regiments under the cadre system. Within the units, acting officers and noncommissioned officers serve in rotation. A permanent commanding officer heads each unit.

The Army considers the ASTP very important. In the estimation of the Army it ranks third in all its hundreds of training plans. The Officer's Candidate Schools rank first, and Aviation Cadet Training ranks second.

What is STAR?

STAR is the Transition Unit where you stay from 5 to 30 days while being screened as a possible ASTP. STAR stands for *Specialized Training and Re-assignment*. A STAR Unit is established at a specified college for the purpose of receiving, housing, and classifying soldiers selected and generally qualified for the ASTP. A STAR Selection Board interviews the soldiers, administers tests to determine whether the soldiers are finally qualified and, if

qualified, the specific field of study to which they will be assigned in the ASTP. The soldier usually remains at the STAR Unit until a section of sufficient size is formed to be moved as one group on scheduled opening dates to an Army Specialized Training Unit.

After a soldier has been assigned to a special course of study by the STAR Unit, he is sent to an Army Specialized Training Unit at the college or university for instruction in that course of study.

Part II. The Navy Specialized Training Program

If I choose the Navy, may I go to college?

Yes, a limited number of selectees are sent to college. There are two such college programs. They are V-5 and V-12. V-5 covers flight training as a V-5 Naval Aviation Cadet and leads to a commission as a naval officer and a naval aviator. The V-12 program covers training in engineering, general deck officers duties, dentistry, and medicine.

UNLIMITED! This word refers to the number of candidates needed for flight training as Aviation Cadets. For the young men who can meet the requirements, Naval Aviation offers rare opportunities. The training is tough, but it produces probably the finest airmen in all the world.

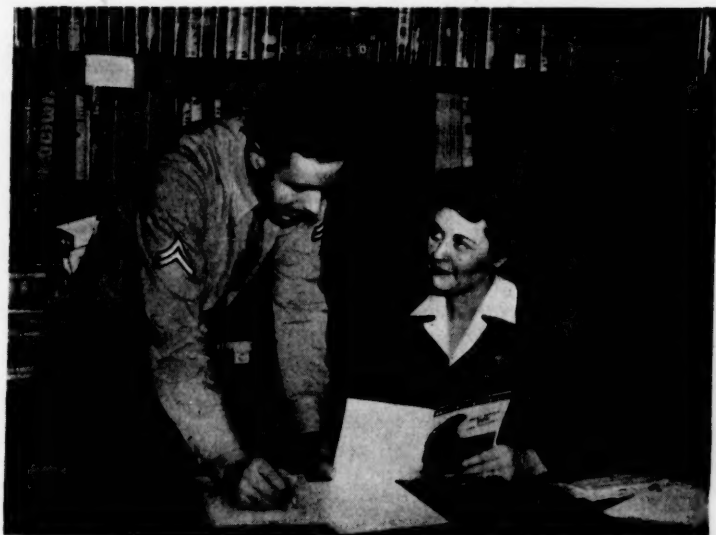
What is this V-5 Program; how does it work?

A young man who is a high-school senior and wishes to enlist in V-5 should go to the nearest office of the Naval Aviation Cadet Selection Board and apply. There are about three such boards in each state. Ask your high-school principal. At this board you go through tests and interviews and fill out personal qualification blanks. If accepted by this Naval Aviation Cadet Selection Board, you stay in high school right where you are until you are graduated.

Having been accepted, you are "earmarked" for the Navy. When your 18th birthday comes, you are free from induction under Selective Service because you have already been accepted by the Navy.

After I am accepted by the Navy for V-5, what do I do next?

You go right on in high school as you were until you are graduated. You are considered as on inactive status in the Navy. During this period of finishing high school, the only requirement the Navy has is that you maintain the same level of scholarship you had at the time of enlistment. On July 1st immediately following high-school graduation, you go on active duty and are transferred temporarily to a college campus and assigned to V-12 Aviation under the Naval College Program. This is the freshman year of College Train-



You can learn of your educational opportunities through the services of the Librarian, Educational Services Officer, or Orientation Officer.

ing and lasts 32 weeks. When you go on active status (as of July 1 after high-school graduation), you receive \$50 per month, uniforms, and maintenance.

At the end of the 32 weeks you are transferred back to V-5 as a Naval Aviation Cadet for 16 months of Naval Flight Training. V-5 is sub-divided for convenience of grouping into AS-V5 for high-school seniors, high-school graduates, and college freshmen who are 17 years of age; and AS-SV5 which is open to 18-year-old high-school seniors currently enrolled in their last semester and 18-year-old high-school graduates or college students. If a man has already had his freshman college year and is enlisted in V-5, he will be given credit for this first year and start upon his sophomore year in V-12 Aviation.

The Naval Aviation Training Program is designed to build top-notch aviators and strong healthy men. It consumes the entire waking time of the student. Uncle Sam is determined to have the finest fighting Air Force in the world!

What are the qualifications for the V-5?

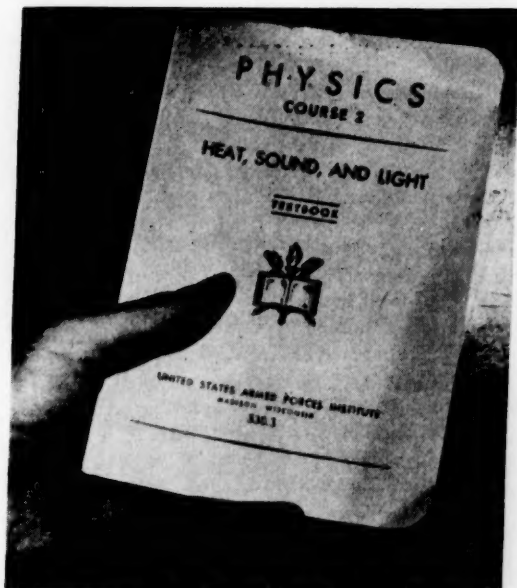
All applicants for flight training as apprentice seaman V-5 must meet the following requirements:

1. Citizen of the U. S. (Foreign-born citizens who have been naturalized less than 10 years will not be enlisted in V-5 except upon the recommendation of the Officer-in-charge of an Office of Naval Officer Procurement and approval by the Bureau of Naval Personnel).
2. Have reached 17th birthday at time of enlistment, but not yet reached 19th birthday.
3. Be unmarried and agree to remain unmarried until completion of flight training and acceptance of a commission.
4. Be a graduate of, or currently enrolled in, an accredited high school or preparatory school with reasonable expectation of graduation.
5. Agree to remain on active duty four years, including period undergoing training as aviation cadet, unless released sooner by the Navy.
6. Be in the upper two-thirds of the male enrollment of high-school class.
7. Pass flight physical examinations.
 - (a) Height—minimum 5'4", maximum 6'4".
 - (b) Weight—at least 115 lbs.
 - (c) Eyes—20/20 vision.
 - (d) Teeth—18 sound vital teeth.
 - (e) Hearing—whispered voice at 15 ft.
8. Be otherwise strong and healthy and free from physical and emotional disturbances. Be mentally, morally, and psychologically qualified for training as an aviation cadet and for a Commission in the Naval or Marine Corps Reserve.
9. Have consent of parents or guardian to enlist as apprentice seaman '7-5.

10. Pass prescribed mental tests (similar to the *Army General Classification* and *Mechanical Aptitude Tests*). Your score must be above average.

What written papers must I present for enlistment?

1. Certificate must be obtained from your high-school principal or superintendent stating that you have (a) good moral character, (b) qualities of leadership, and (c) a transcript of high-school credits to date. The certificate must be sent by your high school to the nearest Office of Naval Officer Procurement or Naval Aviation Cadet Selection Board. Proper forms for this certification should be secured at the Naval Procurement Office if your high-school principal does not have them.
2. Birth certificate.
3. Consent of parents or guardian.
4. Three recent photographs. Front view, head and shoulders only, in business suit with coat and tie, size 2½" x 2½".
5. Affidavit of identity.
6. Names of three references other than relatives.



Many self-teaching texts and End-of-Course tests are available to men and women in the Service through the U. S. Armed Forces Institute, Madison 3, Wisconsin.

What is the nature of the training that I take in V-5?

Preliminary Training. Applicants who are enlisted as apprentice seaman V-5 may expect to be ordered into the College Program (Class V-12 Program) for 32 weeks of college. Upon completion they will be transferred to Aviation Cadet V-5.

Flight Preparatory School. Apprentice seamen V-5 when transferred to Aviation Cadet V-5 are sent to Naval Flight Preparatory Schools.

War Training Service. (Formerly Civilian Pilot Training). Upon successful completion of flight preparatory schooling, cadets are transferred to a War Training Service unit for preliminary flight training and related ground school.

Pre-Flight Training. Intensive physical education and ground school training.

Primary Flight Training. Basic flight instruction at inland Naval Air Stations.

Intermediate Flight Training. Advanced flight training at Pensacola or Corpus Christi.

Commissioning. Wings, and designation Naval Aviator.

Operational Flight Training. Squadron training preparatory to combat assignment.

What would my pay be during V-5 training?

The pay of V-5 Aviation enlistees while on active duty undergoing training is at the rate of their grade: \$50 per month as apprentice seamen and \$75 per month as aviation cadets. While on active duty after the completion of flight training, the base pay, flight pay, subsistence and rental allowance of an ensign or second lieutenant amount to \$291 per month. While serving on active duty undergoing training, V-5 enlistees are furnished with necessary items of uniform and equipment.

How do I qualify for the V-12 Program?

If you want to be a deck engineer, supply corps officer, medical or dental officer, or chaplain with the option of shifting to Naval aviation later, you can apply for enlistment in the V-12 Program of the U. S. Naval Reserve. To qualify you must:

1. Be a citizen of the United States.
2. Have attained your 17th and not your 20th birthday.
3. Be single and agree to stay single until you have completed your training in Reserve Midshipman's School, Supply Corps School, Medical or Dental School, or Theological Seminary.
4. Be physically qualified; height 5-5½ to 6-4; vision 18-20; weight in proportion to height; teeth, 20 vital serviceable permanent teeth.
5. Be between 17 and 20 years if you are a high-school or preparatory-school graduate.
6. Be a high-school or preparatory-school senior, 17 to 20 years.
7. Be continuing your education in an accredited college or university if you do not hold a certificate of graduation from a secondary school.

If I meet the educational and other requirements, how do I get into V-12?

If you meet the educational, physical, and other requirements, apply to your high-school principal to take the *Qualifying Test*, which up to the present time has been held at the high schools twice yearly. Men who successfully pass this test are asked to go at their own expense to the nearest Office of Naval Officer Procurement for an interview with a Naval Officer. Successful candidates are asked to report to the Office of Naval Officer Procurement to be sworn into Class V-12.

Since the beginning of the V-12 Program, a proportion of each entering class has been selected from enlisted men of the fleet. This proportion has recently been increased, and it is possible that it will soon be increased still further, with consequent restriction of opportunities for men direct from civilian life.

What is the training in V-12 like and how long does it last?

All selected for V-12 are allowed to indicate a preference as to the college which they wish to attend and the course of study they prefer. However, the

Navy will have the final say as to which college they will be sent and in selecting the courses in which they will major.

Those who major in engineering are allowed to complete from 5 to 8 terms of sixteen weeks each. Medical, dental, and theological students will be allowed to complete the required number of terms to receive a professional degree and General Deck Officers will be permitted to complete four terms of 16 weeks each under the fully prescribed curriculums.

Who pays for this V-12 training?

You will be paid \$50 a month during training, will wear a uniform, and be on active duty under regular Navy discipline. If your grades fall below standards set, you will be ordered to some other type of duty. If found qualified upon completion of this V-12 college training program, you will be commissioned in the U. S. Naval Reserve immediately or after further specialized training as appropriate.

While taking naval training, do your work carefully and accurately. Whatever the course, learn to express yourself clearly and concisely. Get for yourself a sound working knowledge of mathematics and physics. Keep yourself in good health, develop your physical condition to standards required of naval officers. "Keep in mind that you are training to be a leader of men."

QUALIFYING TEST FOR A-12 AND V-12

The War and Navy Departments have announced that the qualifying test for A-12 and V-12 will be held on March 15, 1944. This test for students who can qualify is held in many of the secondary schools throughout the nation.

March BULLETIN Will Be Devoted to A Junior High School Program

[The junior high school as well as the senior high school has been affected by the war program. However, the junior high school does not loom as large in the public eye as the senior high school since it is in the senior high school that the boys and girls who are more directly affected by the war program are enrolled.] The National Association of Secondary-School Principals will devote the complete March, 1944, issue of its publication, *THE BULLETIN*, to the subject of "Administrative Practices in the Junior High School." This issue will give attention to the regular program of the junior high school as it is affected by wartime conditions. Student government, absenteeism, curriculum adjustment, school-community relations, ability grouping, ungraded classes, reducing failures, round-table conference as guidance techniques, adapting the Victory Corps program—these and other topics will be discussed from the practical point of view; that is, by people in the field who have actually given these matters particular attention.

Evaluating Military Experience for School Credit

HOWARD C. McELROY

Principal McKeesport High School, McKeesport, Pennsylvania

Many questions are raised by Dr. McElroy, regarding secondary-school credit for military experience, which are answered at least partially, in "Secondary-School Credit for Military Experience," by Paul E. Elicker, found in this issue of THE BULLETIN.—Editor.

THE RECENT bulletins of the U. S. Armed Forces Institute,¹ the American Council of Education,² and the National Association of Secondary-School Principals³ have given admirable help towards solving the problem of school and college credit for military or naval experience, but make specific recommendations only in the case of basic training.

The responsibility for evaluating this credit rests ultimately with school and college officers. Armed Forces Institute Memorandum No. 14 of November, 1943, carries the following statement: "The Institute does not grant nor recommend academic credit, but will assemble all available information concerning the in-service training and experience of Service personnel and forward a complete, official report of the data collected to the designated high school or college for evaluation." The responsibility is a grave one, for error in proper evaluation will result in protests from members of the Armed Forces who return to secondary school or college upon their discharge. Secondary-school principals must be prepared to deal justly with them. The Armed Forces Institute has been engaged for some time in preparing standardized tests for the purpose of evaluating their courses. Until the results of these tests have been made public, it will be necessary for principals and others to treat each case as it occurs and make decisions which, though temporary, are at least defensible. These decisions would seem to concern three classes of returned men: (1) those who have completed basic training, (2) those who have taken specialist training, and (3) those who have taken courses in the U. S. Armed Forces Institute.

1. A soldier, sailor, or marine who has completed basic or recruit training, properly certified, should be granted two Carnegie units of credit. Some state departments of education have already concurred with the recommendations of the National Association of Secondary-School Principals in this respect.⁴

¹*Catalogue of the Army Institute*. U. S. Armed Forces Institute, Madison 3, Wisconsin, 1942.

²*Sound Educational Credit for Military Experience*. American Council on Education, 744 Jackson Place, Washington 6, D. C. 1943.

³*Secondary School Credit for Educational Experience in Military Service*. National Association of Secondary-School Principals, 1201 Sixteenth Street, N.W., Washington 6, D. C. 1943.

⁴"The Department of Public Instruction approves the granting of not more than two units of credit for the completion of a definite period of training in the Service, such as the basic training of 13 weeks. Additional credit may not be given for military service alone but only on the basis of competency as shown by tests administered by the examinations staff of the Armed Forces Institute."—*Directive of the Department of Public Instruction of Pennsylvania*, October 13, 1943. The same directive limits the number of units thus earned to eight.

2. The second group of men have taken special technical or specialist courses in the Army, Navy, or Marine Corps. A former student came into the school the other day. He had completed courses in airplane dashboard instruments. This student had completed some training in vocational electricity, and should be granted credit for completing his course in airplane instrument repairs.

Large numbers of the Armed Forces are taking special training to prepare them for aviation. On September 30, 1943, the writer received a transcript of the training record of such a boy from an Army Air Forces Pre-Flight School which bore the following grades: mathematics, 88.3; maps, charts, and aerial photos, 80; physics, 93.3; identification and tactical functions of naval vessels, 86.7; general average 88.7, code reception, aural 10 words per minute, visual 5 words per minute. Decision in this case was reserved until the soldier had completed his experiences and could be properly certified through the U. S. Armed Forces Institute, Madison 3, Wisconsin.

3. Secondary-school principals were somewhat alarmed by the original catalogue notations of the Armed Forces Institute courses. Thus American history was rostered as only 14 lessons, algebra as 10 lessons, and geometry as 10 lessons. More light has been thrown upon the meaning of these courses by Armed Forces Institute Form No. 39 of July 15, 1943, which contains a description of them. For instance, Course 431 in algebra, rostered as 10 lessons, is described as follows: "Deals with algebraic equations, factoring, solving equations which have unknowns, exponents, radicals, the binomial theorem, and the nature and use of logarithms. Senior high-school and junior-college level. Arithmetic recommended as preparation." It would seem from a cursory examination of the course described that the satisfactory completion of it would entitle a student to at least $1\frac{1}{2}$ Carnegie units. The actual determination of satisfactory norms will have to await the publication of such norms by the standardizing committee of the Armed Forces Institute. A rough inspection of Form No. 39 would seem to indicate that academic courses satisfactorily completed in the Forces Institute might be evaluated as follows:

	Units	Credits
English Grammar 131 (approximately 9th grade level) ..	1	2
Business Letter Writing 132 (approximately 11th or 12th grade level)	1	2
American History 311	1	2
Civics 341	1	2
Economics	1	2
Algebra 431	$1\frac{1}{2}$	3
Geometry 441 (Plane and Solid)	$1\frac{1}{2}$	3
Trigonometry 451 (both Plane and Spherical)	1	2
General Science 511 (non-laboratory)	1	2
Physics 521 (non-laboratory)	1	2
Inorganic Chemistry 531 (non-laboratory)	1	2
Typewriting 611	$\frac{1}{2}$	1

Shorthand 621	1	2
Shorthand, Advanced 622	1	2
Bookkeeping and Accounting 631	2	4

EVALUATING COURSES

The initiative for evaluation of credits earned in military service must come from the returned soldier, sailor, or marine. In many cases, particularly in the case of those boys who left high school of their own accord to enter military service, it will be necessary for the secondary-school principal or counselor to give reasonable help to obtain the credits to which men are entitled. The writer prepared the following letter on November 29, 1943, for such a man:

U. S. Armed Forces Institute,
Madison 3, Wisconsin.

Gentlemen:

Please send me the credits of Pvt. John A. Jackson, 702 White Street, McKeesport, Pa. USMC 326127, who enlisted October 12, 1941. He took his basic training at Parris Island, South Carolina, where he spent two months. After four months at New River, North Carolina, he was transferred to Wellington, New Zealand, and saw active service in Guadalcanal. On November 16, 1942, he was admitted to Mare Island Naval Hospital and received a medical discharge on March 15, 1943. Since that time he has been admitted to the Aspinwall, Pa., Veterans Hospital for further treatment.

He now desires to resume his education and would appreciate having credit for military service.

Yours very truly,

The U. S. Armed Forces Institute replied that "an application form has been forwarded to Pvt. John A. Jackson and upon its receipt the Institute will assemble and forward to you an official report of his military training." The initiative theoretically belongs to the soldier, sailor, or marine to apply for such credits. The Armed Forces Institute does not send a transcript of credits (as the writer supposed) but a "report of training." Credits must be evaluated by the school from which the Serviceman wishes to secure school credit.

For making proper evaluations, a *secondary-school principal or other evaluating officer needs a list of norms or suggestions for the evaluation of military credit*. It would be fatal for high schools in various parts of the same country or even in the same state or neighboring states to use diverging practices in the evaluation of such credit. The principle that each school is the judge of its own credits continues to be sound, and principals should jealously safeguard this right; but in a matter so important to a returned soldier, sailor, or marine, standards for the guidance of schools should be prepared as speedily as possible. The suggestion of two units for basic training is a step in the right direction. The various technical and specialist courses should now be studied, and similar specific suggestions made. Likewise, the courses of the Armed Forces Institute should be evaluated as soon as norms have been prepared by their examiners. In the meantime we shall have to deal with each case on the basis of individual judgment and trust that the necessary information for correct and reasonable evaluation will be rapidly forthcoming.

Secondary-School Credit for Military Experience

PAUL E. ELICKER

Executive Secretary, National Association of Secondary-School Principals

MANY SCHOOLS are receiving requests from former students now in the Armed Forces for an allotment of school credit for the educational work they have carried on in the Service. These requests are frequently supported by official records of academic and training achievements from commanding officers of Service Training Schools and units.

Many times, personal solicitation is made by a commanding officer for the award of a secondary-school diploma because of the educational advantage such a diploma will give to the soldier or sailor in qualifying for selection for further specialist training. These records and requests appear in many forms—some in formidable military style and format. They come from many different sources and from many branches of the Service.

Even though the school administrator may wish to be of the greatest assistance possible to former students, he is confused and, at times, overwhelmed by the many requests and the multiplicity and variety of records, materials, and data, often extraneous to the real issue of evaluating and awarding school credit for educational work in the Service.

A CENTRAL AGENCY

The National Association of Secondary-School Principals, through committees and representatives from regional accrediting associations and state educational agencies, has recommended the use of a central clearing agency of the U. S. Armed Forces Institute, Madison 3, Wisconsin, by school administrators.

It is recommended that all requests for school credit from former students be referred to the U. S. Armed Forces Institute and that the students be advised to obtain from the Educational Services Officer, the Orientation Officer of his military organization, or direct from the U. S. Armed Forces Institute, Madison 3, Wisconsin, (there are several overseas branches), a form called *Request for Report of Educational Achievement*. The former student will fill out this form, make a request that it be sent to his former school after the complete service military record is assembled and certified by the U. S. Armed Forces Institute.

The central clearing agency of the U. S. Armed Forces Institute will include all results of examinations taken, a description of the elements of training in any specialist or technical training courses, and all necessary data pertaining to the Service record of the former student.

When the complete record of the former student is assembled, it will be sent to the secondary school, with three copies of a form called *A Report on Accreditation Action*, two of which are to be returned by the school to the

Institute at Madison, Wisconsin, one to be forwarded to the student applying for school credit by the Institute, and the other record to remain on file at the Institute.

All secondary schools are advised to use the services of the U. S. Armed Forces Institute as the central clearing agency for obtaining all Service records of former students in all branches of the Service.

AMOUNT OF SCHOOL CREDIT

In preparation now is a statement and recommendation by a committee of representatives from regional accrediting associations for maximum amounts of school credit for certain types of educational experiences in the Armed Forces. This statement of recommendations will be issued as soon as the regional associations and state educational organizations have given approval. It aims to assist school administrators in the evaluation and awarding of school credit that will be a sound and acceptable educational procedure. The application of this policy should prevent wide variations in the amount of school credit in different localities for the same kind and amount of specialist training in the Service. The application of this forthcoming statement of recommendations on school credit will aid school administrators in resolving the award of school credit that Dr. McElroy discusses in "Evaluating Military Experience for School Credit" in this issue of THE BULLETIN.

HELPFUL REFERENCES

Getting Ready for Induction. National Association of Secondary-School Principals, 1201 Sixteenth Street, N. W., Washington 6, D. C. 10 cents per copy. Discounts on quantity orders. A bulletin for young men 16-18 years of age.

School and College Credit for Military Experience: Answers to Questions. National Association of Secondary-School Principals, 1201 Sixteenth Street, N. W., Washington 6, D. C., or American Council on Education, 744 Jackson Place, Washington 6, D. C. Free on request.

Secondary-School Credit for Educational Experience in Military Service. National Association of Secondary-School Principals, 1201 Sixteenth Street, N. W., Washington 6, D. C. Free on request. Available from state departments of education and regional accrediting associations.

Sound Educational Credit for Military Experience. American Council on Education, 744 Jackson Place, Washington 6, D. C. Free on request. A recommended program for institutions of higher education.

Aeronautics Prerequisites

Should Algebra and Geometry Be Prerequisite to Enrollment in Aeronautics in the Secondary School?

WILLIAM L. WRINKLE

Director of the Secondary School

HARLEY F. GLIDDEN

*Supervising Teacher in Secondary School Science,
Colorado State College of Education, Greeley*

MUCH OF what is included in the programs of boys and girls in the secondary school is decided on the assumption that the completion of certain courses is a necessary qualification for admission to certain other courses. Early in the program sponsored by the Civil Aeronautics Administration for the encouragement of secondary schools in the teaching of aeronautics, the idea that elementary algebra and plane geometry should be made prerequisite was very generally advanced. Recommendations to secondary schools by departments of education in many states specifically suggested that schools make the completion of such courses prerequisite to admission to aeronautics classes.

The identification of algebra and geometry as prerequisite to the study of aeronautics has from the beginning been recognized as controversial, the advisability of which has been consistently questioned by many school administrators. There have been few meetings of school administrators and educational consultants at which the question of prerequisites has not entered into the discussion with the inevitable differing of opinion.

It should be clearly understood in the consideration of this problem that the Aviation Education Service Division of the Civil Aeronautics Administration has no desire to tell school administrators, either state or local, what requirements should be set up for determining the eligibility of students for admission to classes in aeronautics. The CAA is interested in assisting the schools in arriving at what seem to be the most valid answers to the many problems involved in aeronautics education and in servicing the program in every way possible. So far no direct, scientific, controlled experimental research evidence has been reported on the relation of the amount and kind of mathematics courses completed to student achievement in the study of aeronautics. The decision as to whether algebra and geometry should be prerequisite to enrollment in aeronautics has been made on the basis of related and indirect evidence and the general assumption that the completion of certain courses is a necessary qualification for enrollment in certain other courses.

It is the purpose of this article to state the generally accepted assumptions which are basic in deciding that it is advisable to make algebra and geometry prerequisite to enrollment in aeronautics, to evaluate critically the assumptions, to refer to relevant research, to quote authoritative opinion, and, finally, to

present direct research evidence which although too limited to be conclusive may be indicative of what larger and more comprehensive studies now under way may find.

ASSUMPTIONS UNDERLYING AERONAUTICS PREREQUISITES

1. Students who have successfully completed the study of algebra and geometry generally show better achievement in the study of aeronautics than do students who have not had such mathematics background.
2. Teachers of aeronautics prefer that their students have the abilities implied by the completion of courses in algebra and geometry prior to enrollment in aeronautics.
3. Since the study of aeronautics involves the use of certain abilities expected to result from the study of algebra and geometry, students who have completed these courses prior to enrollment in aeronautics have an advantage over students who have not had such experience.
4. The study of aeronautics utilizes so many skills and understandings resulting from the study of algebra and geometry that unless they are learned prior to the study of aeronautics, a large proportion of the total time for the study of aeronautics would have to be diverted to the teaching of the needed mathematics abilities.

THE RELATION OF THE COMPLETION OF ALGEBRA AND GEOMETRY TO ACHIEVEMENT IN AERONAUTICS

Do students who have completed the study of algebra and geometry generally show better achievement in the study of aeronautics than those who have not? The answer is "yes." The verification of this answer should be anticipated in an analysis of the achievement records of aeronautics students whose mathematics backgrounds are varied. An instructor who points out that among the students in his class who have completed two or more years of mathematics, those who have completed a third year and are now enrolled in trigonometry stand out among their classmates with reference to their achievement in aeronautics, is stating exactly what should be expected. In accounting for such differences in achievement among students, care should be taken, however, to make sure that what seems to be a cause and effect relationship is actually cause and effect.

Do students who have studied algebra and geometry show superior achievement in aeronautics because of the mathematics experience or is the increased achievement due to some other cause which is associated with enrollment in and the successful completion of such courses? On this point, there is much related research evidence. There is a high positive correlation between the number of years of mathematics studied and scholastic aptitude or abstract intelligence. Generally, students who do not have high scholastic aptitude do not elect to enroll in or, if required to enroll in, often fail to meet the standards for the completion of advanced courses in mathematics. As a result of such

selection, students who have completed one or more years of advanced mathematics study have higher scholastic ability and because of such advantage are more successful in the academic study of aeronautics. Therefore, the resulting superior achievement in aeronautics observed on the part of the students who have successfully completed algebra and geometry and other advanced mathematics courses may be attributed at least in part to superior scholastic aptitude.

This issue is closely related to the college entrance requirement issue on which there is also much research evidence. It has long been observed that students whose secondary-school programs include the successful completion of two or more years of foreign language, mathematics, and other academic courses make better college marks. The research evidence, however, shows that when scholastic aptitude is held constant, when students of like abilities are compared, there is little or no discoverable relationship between the pattern of subjects taken in the secondary school and the student's success in college as measured by college marks. The evidence tends to show that students of equal ability who study different subjects in the secondary school do college work of equal grade.

AERONAUTICS TEACHERS PREFER STUDENTS WHO HAVE HAD ALGEBRA AND GEOMETRY

Do teachers of aeronautics prefer that their students have the abilities implied by the completion of courses in algebra and geometry prior to enrollment in their classes in aeronautics? The answer is "yes." Most teachers prefer students who have acquired the skills and knowledge which are basic to the study of advanced courses in their particular teaching fields.

Latin teachers prefer students who have a command of technical English grammar skills and knowledge which are of help in the study of Latin. Even though such skills and knowledge may be of little value to the student who does not elect to study Latin, Latin teachers often criticize the English teacher of the preceding grade if the students who come to him, even though they make up only a part of the total group, do not have the English grammar abilities which simplifies the teaching of Latin. Physics teachers prefer students who have learned to use the equation in algebra. Social studies teachers prefer students whose reading ability is at or is better than the grade level of the social studies course they are teaching. Chemistry teachers prefer students who have acquired the basic laboratory skills. Industrial arts teachers prefer students who have acquired the basic skills in planning and design. It is, therefore, only reasonable to expect aeronautics teachers to prefer students who are competent in the application of the basic skills which are taught in algebra and geometry.

The question basically, however, is not what do teachers prefer but rather where may the basic skills and knowledge be taught most effectively and economically. This is quite a different question. Since the function of the

teacher is to teach boys and girls the things which they should be taught and to teach them at a time and by methods which are most economical and effective, the fact that aeronautics teachers prefer students who have studied algebra and geometry before enrolling in aeronautics is of no basic significance as a determiner of when and where the basic skills and knowledge should be taught. In other words, the answer is not in terms of convenience to or the preference of the teacher. The final answer has to be made on the basis of where the basic skills and knowledge can be taught most effectively and most economically and, also, the fact that not all students who take the prerequisite courses continue into the more advanced courses. School mortality data indicate that approximately 25 per cent of the students who enter grade nine, the level at which elementary algebra is most commonly taught, do not continue in school to enroll in grade eleven, the earliest level at which a regular course in aeronautics is likely to be available.

THE ADVANTAGE OF HAVING STUDIED ALGEBRA AND GEOMETRY
BEFORE ENROLLING IN AERONAUTICS

Do students in aeronautics who have completed the study of algebra and geometry have an advantage over other students who have not taken those courses? There is no question but that certain abilities expected to result from the study of algebra and geometry are essential in the successful study of aeronautics. Therefore the acquiring of these abilities prior to enrollment in aeronautics would be advantageous to the student. Since the validity of this assumption is quite obvious, it would seem to justify the requirement of algebra and geometry experience as prerequisite to enrollment in aeronautics. However, there are factors other than validity to be taken into consideration—economy of time and the effectiveness of the original learning.

Is it consistent with economy of time in learning to have a student devote two years to the study of certain courses to achieve the skills and knowledge utilized in the study of aeronautics? Do students develop the desired skills and knowledge as effectively if they are taught apart from situations in which they are used and in which they have meaning as if they are taught in situations in which needs, meanings, and practical application values are recognized? Here we have two new problems which must be answered.

Students learn more readily and in less time when they recognize the need for and the practical uses of the learnings involved. This contention is, of course, supported by the modern psychology of learning which emphasizes the importance of meaning in motivation and learning. Instead of studying and learning something this year because the teacher says the learnings which result will be of value in the study of something else next year or year after next, teaching in terms of recognized needs and problems and involving immediately applicable results is productive of more effective and economical learning. There is no specific research in the field of aeronautics which may be

drawn upon as evidence relating to this immediate problem. There is research in other fields, however, which is quite indicative of the validity of this point.

In the teaching of machine operation skills in the vocational training schools for war production workers, one of the serious obstacles was discovered to be the worker's inadequacy with reference to the basic skills in arithmetic such as simple measurement, the fundamental processes, and the use of common fractions. Early attempts to teach the needed arithmetic skills in a preliminary course before permitting the workers to go into the shop did not produce the desired results. Finally, they were sent directly into actual shop activities and were taught the needed arithmetic skills as the need for the skills and the workers' inabilities were recognized. This procedure was found to be the most effective of the various procedures employed. In fact, the whole program of related training in the field of vocational education is based on the assumption that related teaching, as needs and deficiencies are discovered, is better than pre-teaching, teaching in advance of the recognition of needs and difficulties and the possibility of application.

MATHEMATICS BASIC TO THE STUDY OF AERONAUTICS

There is a general assumption that the study of aeronautics demands an extensive knowledge of and skill in mathematics. As in many scientific fields, the person who becomes a specialist must, of course, go far in the study of specialized subject matter. The man who directs the flight of a plane from a moving carrier at sea and who is to bring it back to its moving base an hour or two later must be highly skilled for navigation. The aircraft designer and the propeller design engineer must be experts in the field of aerodynamics. There is no question about the demands made upon such individuals for highly specialized knowledge and skill in mathematics. But is it the purpose of aeronautics instruction in the secondary school to prepare the student for such highly specialized activities?

There is no assumption in the teaching of chemistry in the secondary school that the student is going to be a research or industrial chemist immediately upon the completion of the course. Neither should there be an assumption that, at the completion of his secondary-school course in aeronautics, the student should be prepared to get into a plane ready to meet the many problems involved in actual flight. The mathematics skills and knowledge actually needed in the study of aeronautics in the secondary school, in fact the skill and knowledge needed to qualify an individual for a private pilot certificate, are surprisingly limited and simple. In navigation, for example, the mathematics skills needed involve the reading of a compass, accuracy in the fundamental processes, and the use of a protractor in measuring the number of degrees in an angle. The most difficult mathematics problem involves determining how long it takes to go so many miles at so many miles per hour!

One difficulty which many individuals have in thinking through this problem is involved in their failure to recognize that the algebra and geometry needed in the study of aeronautics is only a part of the total courses in algebra and geometry as taught in the secondary school. These statements, however, should not be interpreted as minimizing the importance or value of the study of algebra and geometry for other purposes.

The recognition that only a part of the algebra and geometry skills and knowledge taught in secondary-school courses are needed or are used in the study of aeronautics certainly does not warrant the conclusion that algebra and geometry as separate courses should not be included in the school program. It would justify the conclusion that if these needed algebra and geometry abilities are to be taught separate from and in advance of the course in aeronautics, a short course in aviation algebra and geometry could be organized which would make provision for the teaching of the needed abilities in only a part of the time now devoted to the two full-year courses. It would also justify another conclusion that if the needed algebra and geometry abilities can be taught in such a limited amount of time, they might be taught as a part of the course in aeronautics, either at the beginning of the course or as the abilities are needed, without seriously reducing the amount of the time of the course for the non-mathematical content.

AUTHORITATIVE OPINION ON THE NEED FOR MATHEMATICS IN PRACTICAL AERONAUTICS

Although it is admitted that support for almost any point of view on any issue can be found in the statements of leaders and authorities in almost any field, the following testimony relative to the issue involved here is quoted from practical aviation authorities and leaders in education.

Major Al Williams, whose service in the United States Air Forces dates back to World War I, transport pilot, aviation research engineer, lecturer in aeronautical engineering, and newspaper columnist, in one of his newspaper articles in 1942 said:

Careless habits of loose thinking led to the assumption that knowledge of algebra, plane and solid geometry, and trigonometry was absolutely necessary for candidate student pilots.

Of course, a candidate for training as an aeronautical engineer must be educated in higher mathematics. But it isn't engineers—slide-rule manipulators—we need now. It's pilots—men to fly the planes. I can think of no phase of combat flying in which anything more than complete familiarity with simple arithmetic is essential.

The engineering which created the modern airplane is an intensive life work in itself, but it does not require engineering education to learn how to use a plane intelligently.

Lieutenant Commander Ernest G. Vetter, of the United States Navy and author of *Let's Fly* and other widely read books on aeronautics, in discussing principles of navigation in *Visibility Unlimited* says:

It is commonly believed that the study of navigation is very difficult and that it calls for a high degree of technical or mathematical knowledge. Unquestionably such knowledge is helpful in this as in all other applied sciences, but it is a fact that anyone who can read and write and is able to do simple arithmetic can become a competent navigator. All that is necessary to become proficient in air navigation, or aviation, is earnest effort, practice, and common sense.¹

Of a different nature, but relevant to the problem under consideration, is the following statement from *What the Schools Should Teach in Wartime* (1943) by the Education Policies Commission of the National Education Association and the American Association of School Administrators. With reference to the teaching of mathematics and science, the report says:

Beyond arithmetic, wartime mathematics instruction in the secondary school should be definitely related to the actual wartime duties which require more advanced mathematics for their successful operation. Problems and topics drawn from the fields of aviation, navigation, mechanized warfare, and industrial management should be stressed. . . . The teachers of high-school science and mathematics, then, should not seek to build up huge enrollments in the usual pre-war courses.

RESEARCH FINDINGS ON THE RELATION OF COURSES PREVIOUSLY
STUDIED TO ACHIEVEMENT IN AERONAUTICS

Unfortunately, as in the case of too much research on significant problems in secondary education, the research findings to be reported here are based upon such a limited number of cases that the findings cannot be regarded as conclusive. They may be regarded, however, as indicative of what may be anticipated as the probable findings of an adequately comprehensive investigation which is now under way in an effort to determine the validity of making algebra, geometry, and other courses prerequisite to admission to courses in aeronautics in the secondary school.

During the 1942-1943 school year, forty-five students enrolled in the last two years of their secondary-school programs in the research laboratory school of Colorado State College of Education were enrolled in a full-year course in aeronautics. The course was elective. The group included approximately one-half of all the students enrolled at the equivalent of the eleventh- and twelfth-grade levels in the school. No prerequisites were set up for admission. The classes included students who had no previous courses in mathematics beyond arithmetic and others who had completed one, two, or three years of mathematics. Some had completed a year's study of physics and others had not. Provision was made for the teaching of the needed knowledge and skills in mathematics and science as the needs arose. Near the close of the course, the Examinations on Aeronautical Knowledge, the Private Pilot Ground School written examination of the Civil Aeronautics Administration were

¹Copyright, 1942 by Ernest G. Vetter and published by William Morrow and Company, 386 Fourth Ave. New York City.

administered. Complete data on scholastic aptitude and achievement in aeronautics were available on a total of forty cases.

The achievement of students who had completed algebra was compared with those who had not; the achievement of those who had completed courses in geometry was compared with those who had not; the achievement of those who had studied physics was compared with those who had not studied physics; and so on until all significant comparisons were made. Partial correlations were computed to isolate the influence of different factors. With intelligence partialled out it was found that the coefficient representing the value of the completion of a one-year course in physics was $-.2$. The highest positive correlation with the influence of intelligence controlled was found to be the value of elementary algebra, however the coefficient was only $+.26$ which is much too low to be regarded as significant.

Although scholastic aptitude was found to be the most significant of the various factors studied in determining the achievement of students in the study of aeronautics; it, too, was low, indicating the likely validity of the general observation of hundreds of teachers of aeronautics that interest and willingness to work are the most significant determiners of success in the study of aeronautics.

All students enrolled in the experimental course took the CAA examinations. For the country as a whole, approximately 23,000 students or less than ten per cent of all students enrolled in aeronautics courses, took the same examinations. Those students in other schools who took the examinations could, therefore, be regarded as a comparatively highly selected group. A comparison of the scores on the various sections of the examination showed that a larger per cent of the experimental group made passing scores on the examinations than the national averages with the exception of one examination for which the per cent of the experimental group making passing scores was .4 of one per cent under the national average. The evidence based on the results of the examinations would seem to indicate that the necessary mathematics and science information and skills can be taught as needed in the aeronautics course without adversely affecting the results with reference to aeronautical knowledge as measured by the examinations used.

SUMMARY

Students who have completed the study of one or more years of mathematics generally show higher achievement in secondary-school aeronautics than do those students who have not had such previous mathematics experience. The increase in achievement can be accounted for in a large part, however, by the superior scholastic aptitude of those who elect courses in mathematics or who continue in school after the completion of courses in mathematics, if they were required. Since the content of the secondary-school aeronautics course is related to and utilizes certain skills and knowledge learned in algebra

and geometry, the student who has completed those courses prior to enrollment in aeronautics has an advantage over other students who do not have such mathematics background. But the advantage is acquired with too little regard for economy of time in learning. Limited research evidence indicates that when the influence of scholastic aptitude is held constant, the correlation of the amount of time spent in the study of algebra and geometry and achievement in aeronautical knowledge is too low to be statistically significant. Since the mathematical skills and knowledge involved in the study of secondary-school aeronautics are only a part of what is taught in full-year courses in algebra and geometry, the needed mathematics skills and knowledge, if isolated, could be taught separately in a much shorter period of time or, better still, they could be taught as needed in problem situations in the aeronautics course in only a small part of the time usually given to the study of aeronautics.

On the basis of the interpretation of the assumptions, the opinions and the evidence which have been presented, it would seem reasonable to conclude that the practice of making the completion of full-year courses in algebra and geometry prerequisite to enrollment in aeronautics classes in the secondary school is unwarranted.

NEW RESOURCE UNITS

WHY NOT incorporate these new especially prepared teacher units in your school social studies courses? Fifteen units have previously appeared. The following new ones are now available:

- No. 16. "America's Schools."
- No. 17. "Politics in Action."
- No. 18. "The Health of a Nation."
- No. 19. "The American Way of Business."
- No. 20. "The American Standard of Living."
- No. 21. "Urban and Rural Living."

Thirty cents per unit; discount for quantities.

ORDER FROM THE

National Association of Secondary-School Principals, 1201 Sixteenth
Street, N. W., Washington 6, D. C.

Mississippi Schools in the War Program

WHEN TOTAL war engulfed America, it became necessary to re-examine the objectives of public education and to redirect the school program so that it might make a more effective contribution in this nation's fight for survival. In January, 1942, therefore, the State Department of Education issued a statement in which it was pointed out that "The *number one* job of the schools is to help win the war. In carrying out this obligation the schools must recognize a two-fold responsibility. The first is to prepare students in body, in mind, and in spirit to become good citizens and good soldiers in the fight for victory and for the peace that is to follow. The second is to provide opportunities for adults of the community to study, to understand, and to accept right attitudes towards wartime measures that concern them directly, and to train adults to produce the sinews of war."

This obligation was assumed by elementary and secondary schools, both white and colored. During the past year every phase of the public school system from the primary school to the junior college has found ways to participate directly in wartime activity, both in community effort and in the regular pupil schoolroom procedures. The following illustrations give briefly accounts of some of this participation.

FARM PRODUCTION AND MACHINERY REPAIR

More than 23,858 persons were instructed in farm machinery repair, and 100,214 pieces of farm equipment were repaired during the past year. The 400 vocational schools are responsible for this achievement. Despite the fact that they have lost more than 135 vocational agriculture teachers, these schools have gone forward with a very constructive program of vocational education. Practically all of them have had larger programs than ever before. Emphasis has been given to instruction on farm problems that have been brought about by the war. Farm shop instruction and production of "Food for Freedom" have been emphasized. Instruction to adults has been given in more centers, thereby carrying information on critical problems nearer to the farmers and to their families. More individuals have been reached in organized instruction since the beginning of the war than ever before—9,081 in-school boys, 20,270 adult farmers, and 1,056 part-time youth have been reached in the regular program of vocational agriculture, and 27,908 have been reached in the national defense out-of-school youth training program.

As an example of readjustment in the rural white schools, the following sample is typical. This rural white school combined agriculture classes for the in-school group to give more time for the teacher in developing the food program and the farm machinery-repair program with the farmers on their farms. This same school also revised its schedule to give more time for farm work during seasonal demands by (1) starting school earlier in the year; (2) start-

ing school earlier in the morning to give more time for work on the farm; (3) operating school on Saturday during dull seasons to be able to suspend school during peak labor seasons. This school system operates at the present time some twenty courses for the farmers in farm machinery repair, poultry and pork production.

An example of what one rural Negro school is doing to further the war effort: (1) In-school classes are combined to give more time to work with adults; (2) the school district is organized into small neighborhood groups for instruction; (3) special instructors are employed to teach poultry production, pork production, and farm machinery repair; (4) these instructors are teaching ten groups of ten or more per group—two groups in poultry production, seven groups in pork production, and one group in farm machinery; (5) the NFA boys have been and are co-operating in stamp and bond sales and scrap collection with excellent results.

A typical repair program is illustrated by the following report for the month of December, showing articles made or repaired in a single rural school:

4 axles made for wagons	1 wheelbarrow constructed
15 turning plow points sharpened	1 cow trough made
8 pair wagon hounds	4 new plow handles made
170 sweeps sharpened	10 plows tightened with new bolts
16 middle buster points sharpened or pointed	10 axes sharpened
22 brace irons made for wagons	6 hoe handles made
25 cold chisels made or tempered	12 spokes made
10 bolts made for wagon, $\frac{3}{4}$ in.	1 middle buster beam straightened
22 single trees made	5 turning plow beams straightened
15 plow stock beams made	6 turning plow points pointed
1 farm horse shod	2 breast yokes made for wagon
1 pair shafts and irons made for one-horse wagon	1 nose iron made for tongue
4 irons made to hold shafts to axle	10 rings made for breast yoke
20 U-bolts made for wagon	4 beds made for wagon body
1 plate made for wagon	10 plow feet straightened
7 sand bolsters made	3 buck heads made
4 front bolsters made for wagon	2 wings made for middle buster
5 hind bolsters made for wagon	1 point made for middle buster
5 wire stretchers made	6 sweeps pointed
1 plow wing made	22 $\frac{5}{8}$ bolts made and threaded
2 plow wings patched	20 welds made on brace irons for wagons
4 farm horses feet trimmed	8 brace irons made for wagon
16 handles made	4 iron standards made for bolsters
12 wagon wheels built	4 eye bolts made
3 wagon tongues made	1 planter repaired
2 wagon bodies built complete	1 sword made for planter
5 double trees made	7 half shafts pointed
15 cast points ground	4 shovels handled
2 pipes threaded on each end	2 bars made for turning plows
	1 heater door patched

WAR WORKERS TRAINED FOR INDUSTRY

More than twenty thousand workers have been trained and placed in jobs through the Public School Number One War Production Training Program. Equipment valued at more than \$400,000 has been added to the Trade and Industrial Education shops, where many more workers can be trained. The War Production Training Program is now operating with expenditures averaging approximately \$90,000 per month for instructional purposes only.

Among wartime industries supplied with employees through the services of the schools are the recently expanded shipyard at Pascagoula, now employing more than ten thousand workers; the wooden boat building plant operating at Biloxi; a small shell plant operating in Hattiesburg and one, also, in Grenada; a large shell plant in Vicksburg; and many other plants with defense contracts scattered over the state. Other workers have been employed outside the state.

WORKERS TRAINED FOR STORES AND RESTAURANTS

Itinerant instructors in the field of distributive education have been added in waitress training, showcard and window display training, and in electrical training. The war emergencies have brought about a large turn-over of persons employed in restaurants, stores, and other distributive occupations. Efforts are being made by the Trades and Industries Division of the State Department of Education to co-operate with all agencies in promoting wartime training programs. This co-operation includes working with the Training With Industry Branch of the War Production Board, with the United States Employment Service, and with other similar agencies.

HANDICAPPED AND CRIPPLED WORKERS TRAINED FOR WAR JOBS

Employers, in some instances, in order to keep war production in full swing, have had to rely on persons excluded, because of physical disability, from active Military Service. About 600 physically handicapped people have been trained and placed in war production through the activities of the Vocational Rehabilitation Service. In the training and hospitalization of the handicapped, the Vocational Rehabilitation and Crippled Children's Departments have considered first the needs of America; therefore, great care has been exercised in the selection of cases for the program of Vocational Rehabilitation and Crippled Children's Service.

On January 1, 1942, the Vocational Rehabilitation Department had in its files 1601 cases. Since then, 1156 new cases have been added, making a total of 2757. Three hundred and twelve of these were not eligible and feasible. Six hundred and eighty-nine are waiting service. One thousand seven hundred and fifty-six have had training. Six hundred and eighty-nine have been trained and placed on jobs—392 of these were placed in direct war industry and the other 297 would be classed as in indirect war industry. Today there are 1067

persons in some type of vocational training. The Crippled Children's Service has permanent clinics each week at Jackson, Memphis, and Mobile. In addition to these it has ten to fourteen itinerant clinics over the state. Two thousand and eighty-eight children have visited these clinics. Six hundred twenty-two crippled children have been admitted to the hospital. Twenty-one thousand, one hundred and one hospital days were furnished and 1,396 have been fitted with artificial appliances.

ILLITERATES PREPARED FOR MILITARY SERVICES

On April 11, 1942, the Mississippi Illiteracy Commission was formed principally for the purpose of teaching deferred illiterate draftees. Before this time the objective of the Adult Education Program had been to blot out illiteracy in the state of Mississippi. During the years of 1939, '40 and '41 inclusive, more than 10,000 illiterates in the state were taught to read and write. Realizing that the teaching of deferred illiterates draftees was a wartime measure, and that the state of Mississippi has over 16,000 such illiterates, the Mississippi Illiteracy Commission decided to devote its time to the teaching of these men. The county superintendents of the state asked for volunteer teaching by the Negro public school teachers. These Negro teachers, with the adult education teachers, enrolled a total of 5,500 illiterate rejected draftees. Of these, 1571 were made literate and were accepted for Military Service. In addition to this work, 16 white and 64 Negroes at the Jackson Air Base and 450 Negroes at Camp Shelby were taught to read and to write. At Laurel, Mississippi, more than one hundred Negro selectees, who had been deferred because of illiteracy, were assigned by the local Selective Service Board to attend school in the Negro high school building. In this particular group, after less than four weeks, every member, except one, was able to read in the reader, *Our Country at War*, which was prepared in the adult education office. These pupils were able to add problems involving four digits. These men a short time before had been illiterates. One man, after reading a page or more in the reader, stated that "a month ago I could not recognize my name when I saw it." Another stated that he had received a salary increase of two dollars per week, because he had learned to add the tickets and to read the names and addresses of people to whom the deliveries were made.

WARTIME COURSES ADDED TO SCHOOL CURRICULUM

In response to the request of the Army and the Navy, many new courses have been added to the program of studies of the high schools. These courses include radio, automotive mechanics, metal working, electricity, general shop mechanics, nursing, international relations, Pan-American relations, first aid, consumer education, elementary surveying, and blue-print reading. Aeronautics leads the list of such courses added with an enrollment now exceeding 2,000 pupils. In addition, many existing courses have been reorganized for

specific emphasis on war needs. In the regular program of home economics, special emphasis has been given to nutrition, health, first aid, and to conservation of food and clothing. Wartime activities participated in by the schools have included salvaging of metal, cans, victrola records, silk hose, fur and scrap, selling of war stamps and bonds, aiding in Red Cross activities, and serving as hostesses at the USO centers.

Added emphasis has been placed, through the guidance services of the schools, upon the importance of physics and mathematics in mechanized warfare with the result that the enrollment in physics classes has increased four hundred per cent since last year, that nine times the number of pupils ordinarily taking trigonometry are studying that subject, and that an equal number of pupils are studying solid geometry. All mathematics classes have felt the stimulus of wartime changes.

The basic subjects in the school program have changed as a result of the war in that wartime activities have been used to great advantage in enriching the total program of elementary education. The collection of scrap and rubber, and the purchase of stamps have been county- and state-wide projects. Health and nutrition have been given added emphasis by teachers. A study of the problems of democracy has given the pupils pride in the fact that they are permitted to share with the adults in the great war that is being fought.

The Mississippi agricultural high schools and junior colleges have 4634 students enrolled in wartime short-term courses. This number, coupled with the regular enrollment and the number of students attending summer courses, brought 1941-42 students to 8741. A decline of 643 was noted, however, in the regular enrollment, which was 3368 students as compared with 4010 last year. Evidence that these schools are adjusting their courses to the war effort is the fact that ten shop buildings have been constructed, and equipment valued at approximately \$300,000 has been added for the shop and technical courses. There are, in addition, four Civilian Pilot Training programs in progress. It can certainly be said that no school in Mississippi has failed to make its contribution through its instructional program toward aiding the war effort.

VICTORY CORPS

The Victory Corps was planned and introduced in Mississippi schools in order to co-ordinate pupil and faculty resources and activities in a broad program of wartime study and participation. The Corps provides for: (1) guidance into critical services and occupations, (2) wartime citizenship, (3) physical fitness, (4) military drill, (5) competence in science and mathematics, (6) preflight training in aeronautics, (7) preinduction training for critical occupations, and (8) community service. Victory Corps units, with representation in each of the five areas—Air, Sea, Land, Community Service, and Production have been organized in nearly all the larger schools. Reports from the smaller

schools indicate that many of them are organizing such areas as limited curriculums make possible without attempting an elaborate organization. It is estimated that more than one hundred schools have organized their units. The enrollment involved is approximately fifteen thousand.

The Mississippi Literary and Athletic Association which has accepted responsibility for co-operative administration of the Physical Fitness Program will provide evaluation procedures for the schools. The American Legion, also, is co-operating with the Victory Corps in providing competent help for military drill for Corps members. Army officers from various camps and bases over the state are providing military and technical instructors. A splendid Victory Corps program of activities is illustrated in the following report. The Victory Corps in the Ocean Springs School has enrolled one hundred and three pupils. Their activities include: (a) salvage of 86,000 pounds of scrap, (b) messenger service, (c) first aid and nutrition classes, (d) assistance in registration of mileage rationing, (e) Junior Red Cross activities for Army and Navy, camp and hospital service, (f) participation in classes in pre-flight mathematics and science under direction of instructors from Keesler Field, (g) organization of a fire-fighting unit to replace men who have gone to the Armed Forces, and (h) school athletes directing physical education program in lower grades.

TEACHING PERSONNEL MAINTAINED

The nation-wide teacher shortage has been a noteworthy wartime difficulty in Mississippi. Early efforts made by school leaders, colleges, and accrediting agencies, however, prevented a breakdown in the instructional staff of the public schools. In March 1942 a series of conferences over the state were instituted. Procedures were drawn up for administrators and teachers. The colleges provided special and refresher courses for teacher replacements. By such means a strong force of teachers has been maintained in most of the counties.

SCHOOL CHILDREN CHRISTEN THE "PAT HARRISON"

School children, teachers, and truck drivers in co-operation with the State Salvage Committee participated in the scrap campaign. This campaign reached its climax at the launching and the christening of the Liberty Ship, "Pat Harrison," on December 24, 1942. The ship was named by Mississippi school pupils in honor of the late Senator Byron "Pat" Harrison. In recognition of the great services rendered by the schools in the salvage campaign, three high-school students, Sidney Morris of Hernando Consolidated School, G. D. Jackson of Sledge Special Consolidated School, and Joseph Seymour of St. Martin School, together with Supt. J. F. Russum of Hernando, were given a trip to New Orleans by the War Production Board for the christening.

PUPIL ACCELERATION ALLOWED

A desirable amount of acceleration of pupils through high school has been provided by the State High School Accrediting Commission. High-school stu-

dents may now earn a total of from four to six new units of work by attending summer school. Many summer schools now operate for a longer term than heretofore and permit students to earn in a single summer as many as two or three units of new work.

GRADUATION PERMITTED SENIORS IN THE SERVICES

High-school students entering the Armed Services or the Merchant Marine may now receive high-school credit not to exceed two units toward graduation for successfully compelling basic training in these Services. Seniors entering the Service at mid-term may thus receive their diplomas with their graduating classes. Other pupils may record these military credits and may apply them toward graduation when they enter school after the war.

SCHOOL SERVICES IN DEFENSE AREAS

Defense activities in a number of areas in Mississippi have caused heavy increases in population. School enrollments have greatly increased. The State Department of Education has co-operated with the United States Office of Education in working out a program of Federal aid to schools having increased enrollment and increased expense in maintaining school services because of defense activities. The Federal government, on recommendation of the State Department of Education, has made grants to take care of additional teachers, school plant facilities, and various other increased school costs in defense areas in Mississippi as authorized in the Lanham Act (Public Law 137). The law provides that the Federal government may provide community facilities where there is an acute shortage of these facilities, where this shortage has resulted from defense activities in the area, and where the community is unable to provide the necessary facilities without a heavy increase in the tax burden. Many of our defense area schools could not possibly function today without this assistance which they receive from the Federal government. The enrollment of the schools at Pascagoula, Mississippi, was approximately 900 before defense activities began in that community. A year later the enrollment of Pascagoula schools exceeded 2300. This is an example of the increased school burden of these areas.

In making surveys of school needs caused by defense activities and in requesting grants from the Federal government to take care of these needs, the State Department of Education is not only co-operating with the Federal government in the defense effort but is rendering a real service to Mississippi's defense area schools.

CHILDREN OF WORKING MOTHERS PROTECTED

The public schools, as a part of the manpower conservation program, have organized services for the care of children of working mothers. These services include nursery schools and kindergartens for pre-school age children and playground supervision before and after school and on Saturdays for

school-age children. These educational services are sponsored by local school boards in areas needing these services; they are co-ordinated with certain other services which are offered under the supervision of the Department of Public Welfare and the State Board of Health. The Federal government supplies funds for the support of these services which are urgently needed, especially in defense areas. The purposes of this program are:

1. To protect children who are without home care and supervision because their parents are at work.
2. To provide such care for children so that many mothers who are not now working may be available for jobs in defense industry and other occupations, thereby conserving manpower.

Applications for these services were filed for Pascagoula and Gulfport. Surveys to determine the extent of these needs have been undertaken in other communities. Programs for these services are organized and funds are requested to support them.

HEALTH AND NUTRITION PROGRAM INITIATED

A division of health education which consists of the school health co-ordinator, the medical director, a nurse, a part-time nutritionist, the assistant director of health education, and a secretary, has been set up by the State Department of Education and the State Board of Health. The objective of the school health co-ordinated unit is to devise improved methods by which the teaching of health in the schools and the practice of health by the children and by the people in the community may be made more effective. The findings of the draft boards in their examination of the young men from twenty-one to twenty-eight years of age indicate the neglect of necessary health teachings and of necessary health practice. As a result of this neglect, a large percentage of the young men and young women graduating this year will not be physically fit to participate in the necessary war effort. This is not a condition that can be remedied in a short time, but every effort of the school health service has been directed toward the parents, teachers, and health workers in the solution of better health standards for the youth. The means which have been used are: medical examination, with reports to the teacher and parents of the defects found; inspection of food handled in the establishments in and near the schools; inspection of water and milk supplies; and stimulation of interest in the securing of a well-balanced nutritional diet for each child, both at home and in the school. The school health service workers are emphasizing the need for physical fitness, especially among the older age groups of boys and girls who may actually see Military Service.

CIVILIAN DEFENSE

School and county superintendents and State Department of Education members have co-operated from the beginning with the program of the Office of Civilian Defense. Many of them qualified as instructors and have con-

ducted classes in auxiliary fire training, in chemical warfare, and in disseminating information through the medium of forums and addresses before civic groups. School people have also held training schools at the different state colleges for the civilian defense program.

WAR FILMS DISTRIBUTED

A library of more than 100 films dealing with various aspects of the war has been established in the Department of Adult Education under the direction of the Office of War Information. Two motion-picture projectors have been purchased. The schools of the state are furnished the films free of charge through the activities of the members of this department, and more than 26,000 people have been benefited from this program during the past six months. The films are shown to civic organization and to public gatherings of all kinds as well as to schools. This program, along with the program of forums, is considered to be of great value in maintaining civilian morale. More than two hundred forums with an attendance in excess of 25,987 have been conducted.

TRANSPORTATION

County superintendents and the State Department of Education representatives have co-operated with the War Production Board in surveying transportation needs for the schools. As a result of activities of school people in this regard, additional tire allotments were secured so as to prevent a breakdown in school transportation. Mississippi was the only state to secure an allotment of tires specified for school transportation. In a large measure, the problem of transporting defense workers has succeeded through the co-operation of school transportation units.

TEACHERS CONDUCT REGISTRATIONS

Classroom teachers performed the major part of the work in the draft registrations, the sugar rationing registration, the gasoline rationing, and the point rationing registrations. Teachers are living examples of what citizens will do for their country without expectation of monetary reward or consideration. They have been and are demonstrating that patriotism is that something an American gives to his country, irrespective of personal sacrifice or hardships. While they are not alone in rendering service to the nation on a purely sacrificial basis, they at least present an outstanding example, for from the beginning of the registration and the rationing programs, they have played a major role in seeing that the jobs were done and done well.

Do You Get

STUDENT LIFE

ORDER **Now** Through Your Association

Single subscriptions (8 issues) \$1.00

Three or more in single wrapper, 50c each

When a School Goes to War

ROBERT C. RAY

Principal, Cuyahoga Heights School, Cleveland, Ohio

CUYAHOGA HEIGHTS school teachers, graduates awaiting induction, school custodians, and older machine-shop students have all joined together to operate an unusual war plant. This war production unit is organized and located in the Machine Shop of Cuyahoga Heights School of the Cuyahoga County system. Since its opening on June 7, 1943, this group, under the leadership of the shop instructor, A. G. Thiem, has produced over fifteen thousand machine-tool items.

The project had its inception during the winter months of 1942 when four of the teachers decided to prepare themselves for shop work by attending a voluntary shop class on Saturdays. Instruction for this group was volunteered by the shop instructor. In the spring, after these student-learners obtained the feel of the machines, they conceived the desire to have a war plant right in their own school. It seemed unpatriotic, so the group thought, to allow the machines and equipment of the shop to remain idle during the summer months. They felt that the War Production Board and the local board of education would be interested in a plan to have the machines, the men, and the students of the school produce for the war effort. A request and plan to open the school shop during the summer months for work on war products was presented to the superintendent of schools, Mr. Terry Wickham. This was a new idea and there were many uncertain administrative issues involved. It took weeks of discussion, investigation, and study on the part of Mr. Wickham and the Cuyahoga County superintendent of schools, Mr. W. G. Bahner, to arrive at an acceptable solution—one that was practical and administratively operative.

The plan was approved and a way was found that met with the approval of the group. The Cuyahoga Heights Board of Education announced in May that a summer school would be operated. The school was open to all who might be interested, especially to the teachers and graduates of Cuyahoga Heights School.

The immediate task before the group was to secure orders to keep the wheels turning during the summer months. The War Production Board was consulted and responded quickly and willingly. Orders were soon forthcoming because the school had already established a reputation with the War Production Board through the work which had been done during the regular day school in the winter months. Production items of the summer school included aircraft starter shafts for the Leece-Neville Company, precision chucks for the Erickson Steel Company, special machine work for the Ohio Crankshaft Company, and machine-tool items for the Cleveland Automatic Machine Company.

The project grew, and to date, several firms have been added to the list of sub-contracting companies. The new additions include Thompson Products, Inc., Thompson Aircraft Products, and Marquette Metal Products Company. Money earned by the group is paid directly to the workers and students and they, in turn, pay tuition to the Cuyahoga Heights Board of Education. To date, the student-worker list includes over thirty persons. All of the Cuyahoga Heights teachers were eligible to attend the school and among the summer students were to be found three women—two students and one faculty member. Eight of the nine men on the school staff participated in the project and were able to operate practically every machine in the shop.

Mr. W. G. Bahner, who succeeded Mr. Terry Wickham in the superintendency of the school, discussed the success of the project with the high-school principal, Robert C. Ray, who had worked in the program from the start. He then proposed to the board of education that they continue the project during the winter months. This plan met with the approval of the group, and teachers and students again signed the time cards and reported for duty on a part-time basis.

The shop is now producing eleven hours daily. It is operated by the regular day-school pupils from 9:00 A.M. to 4:00 P.M. From 4:00 P.M. to 10:00 P.M. the teachers and advanced pupils and custodians keep the production wheels rolling. When the school first opened, some of the work required only simple turning, but with the increase in experience and skill of the workers, more difficult work was sought, and at present, many of the purchase orders call for jigs and fixtures, some of which require very close tolerance.

Recent improvements in the program include the use of an inspection department which, manned by high-school students in the program, checks all work. In doing the above work, the students have access to Webber Gauge blocks correct to .000004 of an inch, a super-sensitive comparator, and a magnasine plate for use in checking compound angles to within .00005 of an inch. Emphasis throughout the program is on educational instruction and experience, as well as ability to produce work acceptable to industry.

GETTING READY FOR INDUCTION

A 32-page Bulletin for Young Men 16-18 Years of Age Who Are Preparing to Enter the Armed Forces. Hundreds of high schools are ordering this Bulletin. Order Your Supply Today From Your Association. Ten cents a copy or fifty copies for \$2.50

Conflicting Theories of Secondary Education in a Time of War

R. L. POUNDS

College of Education, Ohio State University, Columbus

SECONDARY education in the United States has been increasingly in confusion the last few decades. The overflow of the doctrine of formal discipline, the rapid increase in the number of pupils in the secondary school, and the great social, economic, and technological changes through which the world has gone are some of the factors in the ferment producing this confusion. This war has served to bring this confusion into bold relief as well as to reveal a lack of flexibility of the school in adapting to the rapid changes necessary in war times. On the surface, secondary schools seem to be well united in a common task and to be doing a good job of training their pupils for total war in spite of tremendous handicaps. However, underneath there are tensions, frantic efforts to maintain things as they were, and above all a determination to "go back" as soon as the war is over.

The confusion in education both before the war and now is due in part to fundamental differences in opinions among the leaders of education as to the role of the school in American society. On the other hand a large part of this confusion is due to the willingness of many educators and teachers to pursue a policy of "drift" or "blind opportunism." There is widespread indifference toward any thinking as to the fundamental place of the school in a democratic society. Many of the schools have made changes in their practices as demanded by the war out of deference to public opinion but inwardly protesting while so doing. Other schools have swung over to a narrow concept of specific education for war. One is impressed by the fact that, for a great proportion of the schools, the changes have been superficial, masking the fact that business is largely conducted "as usual."

As to the present indifference a reference to the experience of World War I may be revealing at this point. There is evidence that at that time the schools did an excellent job in meeting the immediately crucial needs caused by that war. P. P. Claxton, United States Commissioner of Schools during the first World War, speaking of the achievements of the school at that time, said:

Efforts, too, of the pupils themselves were effectively enlisted in drives for liberty loans, thrift-stamp sales, and Red Cross aid, in increasing the production of food and the saving of it, and in harvesting of crops where labor supply was inadequate. Moreover the content of practically every study in the curriculum has been profoundly modified by war considerations leading indirectly to a vitalizing of work, never before experienced by the schools of the country.¹

¹U. S. Bureau of Education, *Report of the Commissioner of Education for the Year Ended June 30, 1918*, p. 37.

However, E. S. Evenden, writing twenty-four years, later could say:

The public schools, with a teaching personnel depleted in number and ability, did their valiant best to win the war but showed little vision beyond the day-by-day calls for immediate services. Our failure then to conceive and plan collectively for a "humane and rational world order" of self-respecting and mutually respecting nations, not only willing to live and let live, but desirous of helping each other to live better is one of the reasons why we are again at war fighting to retain the blessings we neglected to safeguard during peace.²

DIFFERENCES OF OPINIONS AS TO THE ROLE OF THE SCHOOL IN AMERICAN SOCIETY

Now let us look to the differences of opinion among the leaders of education as a source of present confusion. These differences for the most part are fundamentally philosophical. These philosophical differences lead to wide cleavages in the practices recommended by those leaders. In recent articles³ in *The Bulletin* by Joseph Justman, some of these differences in thinking were analyzed for two aspects of education.

Recently the writer of this present article had occasion to analyze the thinking of the leading educators on the function of secondary education in time of war. For purposes of convenience and comparison, the differing viewpoints have been organized according to the four schools used by Justman in the aforementioned articles, namely, Humanism, Social Evolutionism, Social Realism, and Experimentalism. In the remainder of this article an analysis is made of each of the four educational theories in terms of its recommendations for the school and with particular reference to the implication of war demands.

1. *Humanism and the War*

While humanism exerts little influence on secondary education except indirectly through the colleges and universities that indirect influence is considerable.

Before the war humanism held that the schools should not be too much concerned about the grosser economic problems of these times. Man has become too much a materialist. While obviously it is necessary that we have food, clothing, and certain other material things, Americans have too much tended to put these things to the fore as opposed to things of the "spirit."

Instead of education becoming profoundly concerned over economic and other "material" problems it should turn its attention back to educating the minds of the leaders through the use of the "classics." After their minds have been developed, they will be able to solve the important problems of our society. Those who are not capable of studying the classics may be given voca-

²"Lessons from the War of 1917-18" *Education Record*, XXIII (October, 1942), p. 660.

³"Common Points of View Regarding Individual Differences in American Education," *The Bulletin of the National Association of Secondary-School Principals*, XXV, No. 100 (October, 1941), pp. 45-54.

"Democracy in Education; A Study in Meaning," *Ibid.*, XXVI, No. 104 (February, 1942), pp. 71-84.

tional training in order to produce the minimum of goods needed by our society.

In the view of the humanists, the function of the school is not to lead society but to develop leaders. If it is in any sense to "lead" society, it should lead it away from its false preoccupation with the crasser material things.

Humanism supports our "democratic society" as opposed to fascism because the latter provides no opportunity for freedom of the spirit. Fascism is a reversion to barbarism. It may be said that fascism is one result that befalls people who place their faith in material things and ignore the "spirit."

President Hutchins of the University of Chicago, a leading advocate of humanism, in a recent article states that:

Universities and colleges of the United States are now instrumentalities of total war. . . . On the scientific front the higher learning is doing more and doing it more effectively than anybody could have hoped. . . . But on the teaching and training front we have chaos. . . . The reasons are that . . . among other things we . . . have failed to use the college to do those things they are better equipped to do than anybody else.⁴

Now what should the colleges do to help in the war emergency?

In the first two years these students should attempt to get a liberal education, the education, that is, which is the necessary foundation for advanced study, for understanding our society and what we are fighting for.⁵

How is this liberal education to be secured?

The liberal arts are the arts of thinking; they involve primarily reading, writing and figuring and require thinking about history, literature, philosophy, and science. . . . We need to develop mental discipline and habits of clear incisive thought . . . which are necessary characteristics of military and naval leadership. Such mental discipline and such habits of clear incisive thought are the prime objectives of liberal education. . . . I am proposing that the higher learning should be reformed to do what we have always said it did—train the minds of the leaders of our country.⁶

For the humanists, it is to be "education as usual" for those persons with whom they are mainly concerned, the intellectual aristocracy. The training of the mind for the humanist has meant and during the war still means reading the classics, the great works of all times, in spite of the opening assertion of the above quotations that the schools are now "instrumentalities of total war."

For those who are not capable of such mind training, Hutchins would evidently be quite willing to give the military and technical training required by the present emergency. However, Hutchins' attitude toward specific war courses in the colleges is shown in the following:

The tendency of some accelerated programs has been to squeeze out the things worth doing because they are superficially less attractive than the

⁴"Blueprint for Wartime Education." *Saturday Evening Post*, August 15, 1942, p. 12

⁵*Ibid.*, p. 72.

⁶*Ibid.*

things not worth doing. The situation has been aggravated by the presumed necessity of adding to accelerated programs more waste, water, and frivolity in the guise of "war courses."⁷

2. *Social Evolutionism⁸ and the War*

In normal times, the social evolutionist takes his cue for education from the evolution of the race. In the process of this evolution, certain learnings have been achieved which are important for the preservation and further evolution of the race.

It is primarily the function of the school to select those race learnings which are essential to the progressive evolution of the race and to bring all individuals up to a minimum standard in them. Among these are the tools of learning: reading, writing, number skills, and other techniques needed in our society. But more important are lessons in social living taken from our history, teaching such characteristics as honesty, dependability, initiative, and independence. These are important elements needed for any society and do not vary with the other and more superficial changes of our world.

Like the humanist, the social evolutionist believes that after the individual has been trained in the essentials, he will be able to make wise choices for society's improvement. Furthermore changes in society are slow. To attempt to hurry the process leads to maladjustment. While we should attempt to eliminate maladjustments, to attempt to hurry the process of societal evolution is to invite disaster. Any new scheme which would undermine the characteristics that have fostered social evolution, such as self-reliance or self-discipline, would lead to particularly unsatisfactory results. The school, itself a result of an evolutionary process, must be concerned with the methods of fostering and making smoother the forward progress of the race.

The social evolutionist like the humanist thinks that the schools should be geared to aid the war effort. However the war provides evidence that the procedures hitherto advocated by the social evolutionists are equally valuable during wartime. William C. Bagley in a recent article says:

It is clear now that the winning of the war will depend more upon a high level of informed intelligence and a high level of developed skills than it will depend upon any other single factor or combination of factors. . . . The informing of intelligence and the development of skills are primary functions of education.⁹

Also Charles H. Judd uses the war with its emphasis on vocationalism as the justification for a point he has long advocated.

Vocational education can and should be made a wholesome part of the schooling of every youth. . . . Vocational education furnishes the best possible means of teaching the essential facts about human evolution. . . .

⁷"Education at War," *The North Central Association Quarterly*, XVII (October, 1942), p. 173.

⁸The reader will recognize this as a term "invented" by Justman to apply to the philosophical school represented by Charles A. Judd, Henry C. Morrison, and William C. Bagley.

⁹"What Education is Learning from the War," *Educational Forum*, VII (November, 1942), p. 5.

The most important curriculum revision . . . is the introduction in the curriculum of the study of human evolution. . . . The study of evolution is an account of the focal points whose activities have resulted from the exercise of man's powers of discovery and organization.¹⁰

For the social evolutionist the abruptness of changes resulting from the war does produce harmful effects to education. For the most part, however, these changes in education are in the direction of more emphasis on certain skills now crucially needed. For this reason, the war provides a good argument for the thing that the social evolutionist has long advocated, namely, teaching the essential skills, learnings, and social characteristics necessary for the perpetuation and further development of the race.

3. *Social Realism¹¹ and the War*

The social realist holds that the school should get its cue from present society. Since the school is one of the institutions of our society and financed by it, it cannot go beyond the decisions of that society. The school should not decide what kind of a society we ought to have and educate for it. It may call society's attention to the issues and clearly outline the things involved in the decision but the decision is society's. The school which ignores this is only confusing the issue and is in the long run deterring progress.

The school is not the leader of society but the agency of society through which it studies itself, suggests needed changes, and educates pupils for living in terms decided by society. The school's curriculum should consist of units designed to give the understandings, skills, and facts needed by the individual to live effectively in society. The goal of education is social competence.

The social realists are very influential at present in places of leadership in education. The social realist view is strong among national school administrator groups such as the National Association of Secondary-School Principals and the American Association of School Administrators. The Educational Policies Commission also represents largely that viewpoint.

The fact that the control of the American school system is local, strengthens the realist's view. The attention of the schools has been drawn to social ills accentuated by the recent depression. Furthermore, the urgent demands in the present crisis for skilled manpower places emphasis on quick response to those demands. Specific training in specific skills to meet specific needs is the order of the day.

During a time of war, societal demands, complex though they may be, are relatively simple because society is more united on immediate goals. Social realists can very effectively marshal the resources of their institutions toward a simply defined goal supported by the urgency of real and concrete demands.

In a recent statement, the Educational Policies Commission divides school

¹⁰"The Future of American Education," *Education Digest*, VII (December, 1942), p. 9.

¹¹This viewpoint is represented by men such as Thomas H. Briggs and Francis G. Spalding.

pupils into two groups, those that will fight or work in war industry and those who are too young unless the war is prolonged. The Commission takes the position that for the great majority of the first group,

We are now concerned with developing their fitness for service in the war industries and for fighting survival in battle. The tyranny of time squeezes out everything that is less than essential. Long-range values, for them, must be subordinated to the life-and-death needs of today and tomorrow.¹²

In the next paragraph, however, it says,

We recognize fully that the problems of the peace are not unrelated to those of the war, that the secondary school must and should save some margin of time for the former.¹³

There is more of a tendency among the social realists than any other group to maintain that the things the schools are forced to do during war are good to do also in times of peace. The following quotation is apropos here:

The program for education in wartime, as presented in these pages, is not, in some respects a program that we would favor in peace. It will require us to dispense with many cherished and valuable educational activities. . . . Nevertheless there are compensating gains. If it is a good thing to teach nutrition in wartime, it is a good thing to teach nutrition in peacetime. So it is with reference to the teaching of thrift, good habits of saving and spending, personal hygiene, public health, first aid, safety, habits of industry, vocational skills, civic loyalty, and community services. If war brings about a more generous recognition of the value of such education, it will not be wholly detrimental to secondary education in this country.¹⁴

In the same publication, in the discussion of citizenship education¹⁵ there is a great emphasis on the "musts of the war," as "We Must Win the War," and "We Must Keep the Ideals of Democracy Alive," and "We Must Have Faith in the Future," but not as much emphasis as the experimentalists would like on the development and use of intelligence in the solving of common problems. The social realists tend strongly toward indoctrination of the young in those attitudes and behavior accepted by society.

4. *Experimentalism and the War*

This school embraces most of those who follow the pragmatism of John Dewey. Most of the so-called progressives may be identified with this school. The experimentalist would agree with the social realist as well as with other educational theorists who hold that the school is an agency of society. The role which the school must play as society's agency provides a point of difference. The education of the child necessitates the school's selection of experiences. While some of the experimentalists would wish to lead the child to certain conclusions about the nature of the society-to-be, other experimentalists insist that it is the school's function to give the pupil experiences that will enable him to make intelligent decisions about that society. For the latter the primary

¹²*What the Schools Should Teach in Wartime*, p. 3.

¹³*Ibid.*, p. 4.

¹⁴*Ibid.*, p. 7.

¹⁵*Ibid.*, pp. 27-30.

function of the school is to uncover the basic conflicts of our society and by the means of appropriate learning experiences help the pupil to make his own decisions. The pupils should be educated not only to make those decisions but also be educated to act on them. They will thus be enabled to construct the kind of society they want. The best way to educate the adolescent is to give him practice in carrying out his own decisions in a wide range of experiences.

The school should choose the experiences for the pupils not in relation to the adult needs in the society but in relation to the needs of the adolescent. These are not only needs in the sense of his own immediate desires and interests but also what those needs ought desirably to become in the light of the ideals of our democratic culture.

The experimentalists are probably as much divided among themselves on the precise course to be taken during the war and afterward as are the other schools. The reason for this division is that they do not have a simple source for the answer to their problems such as the "crystallized thought from the ages" for the humanist, the race learnings of the social evolutionist, or the present relatively stable and unified social demands of the social realist. Holding their tentative hypotheses on the bases of personal and social experiences which are unique with each individual, they would be expected to arrive at widely differing conclusions as to the course to be pursued during the war.

One group of experimentalists believe that the basic purpose of the school is to help students to clarify the meaning of democratic living in the modern world and to provide the learning experiences necessary for living in such a society. While they do not insist on a detailed "blueprint" of the particular order which they desire, this group does insist on the need for "educational planning now," planning both of structure and curriculum. This planning would be continuous and always in terms of democratic ideals. Others of this school would want to posit a more definite blueprint of what the structure of an ideal democratic society should be and to educate the pupils for that particular society.

Most experimentalists are not as prone as the social realists to say that the things we are doing now will be good after the war. L. Thomas Hopkins while pointing out many values of the war in improving education, raises a warning as to possible ill effects:

1. Possibility of authorization controls in the interests of promoting the war effort will be extended into the years of peace.
2. The present breakdown in home and family life may effect both in the present and future the quality of the education which the school can offer children.
3. Public and school children may lose faith in the ability of education to adapt schools to their needs.¹⁰

¹⁰"The War and the Curriculum," *Education*, LXIII (February, 1943), pp. 346-351.

On the whole the experimentalists do not tend as readily as the proponents of the other schools to "mouth" slogans and to accept additions to the curriculum without intelligent consideration of the activity in relation to the whole program. The tendency is to question even in wartime the educational advisability of a recommended practice even if urgently recommended by some one in authority.

If war activities are necessary in meeting the present needs of boys and girls in present society, they would like to see them an integral part of the total school work. They tend to discount such superficial incentives as the High School Victory Corps as destructive of the essential unity of the educational process, as well as lacking in breadth of educational objectives.¹⁷

THE FOUR PHILOSOPHICAL SCHOOLS COMPARED

Times of extreme crises, such as war, tend to bring together the various schools of educational thought to the extent of a verbal recognition of the impelling urgency of war demands. On the one hand the urgency of the emergency tends to submerge philosophy in the doing of those extremely important things needed in the preservation of society. On the other hand there is a place in which the philosophies meet on a common ground in the emergency. The needs of the experimentalists become the societal demands of the social realists. The leisurely pursuits of the humanists and social evolutionists must be rudely interrupted by the stark realities of the present. The points of common ground, however, only serve to make greater the contrast in the peripheral educational activities recommended by these groups. Their attitude toward the things the schools are impelled to do by the emergency and the practices advocated for the school in any residual time, still provides the cue for their fundamental thinking which is little changed by the war.

It is interesting to note that each of the four schools of thinking are studying the implications and demands of the war in terms of its own philosophy and its own conception of the secondary curriculum. Each school of thought finds certain elements of the present situation that support its point of view but also each school, except possibly the social realist, finds that the war is to some extent pushing education out of its normal function. They all conclude that some things being done now should be done by different methods in peacetimes.

This is not to say, however, that even the social realists would do exactly the same thing if there were no war. For the social realists the war does, however, bring acutely to the fore the type of thing they stress, namely, responsiveness to public demands.

Both the social realists and the experimentalists find values arising out of war that fit into their conceptions of education. The social realist looks with favor on the close tieup of the school with the realities of present society.

¹⁷Frederick L. Redefert, *loc. cit.*

Each group of educational theorists see the main function of the school to be what it was before the war. The humanists would develop the mind through the classics. The social evolutionists would seize the opportunity to stress the essentials including a study of the evolution of the race. The social realists would teach specific skills relating directly to the war effort. The experimentalists would be interested in providing rich experiences in line with the needs of the boys and girls. These needs would of course be somewhat changed by the war from what they would be in normal times.

AN IMPORTANT FUNCTION OF THE SCHOOL IN A DEMOCRACY

In spite of the urgency of the war demands on the secondary school, in spite of the handicaps in the way of reduced personnel, and in spite of all the other limitations of the present situation, the secondary schools need to study the conflicts involved in the differences of the above four educational theories. While the writer does not believe that the above theories are equal in merit by any means, a consistent philosophy is preferable to the "drift" policy of most schools. Also the writer thinks that there is hope in the fact that the leading thinkers of each theory are examining the present scene to see the implications for their own philosophies. In too many cases, to be sure, the search is for justification rather than for light. There needs to be a search into what should be the bases of a philosophy in terms of the implications of war and of the general contemporary social scene.

To the writer the philosophy of experimentalism offers the logical outgrowth of the genius that is America and is truly akin to the changes in the world resulting from modern technology and the impact of the global war. American democratic institutions were founded as a great experiment built around the democratic ideal. America's technological civilization is built on the ability of man to plan and to experiment. While many Americans of the present day oppose further experimentation in governmental forms, social institutions, or *mores*, very few Americans oppose the experimentation of a scientific technology. It would seem that a consistent approach to education in the American democracy would demand the extension of the experimental approach in attacking the problems of education. The writer believes that in the experimentalist school lies the most hope for the development of means of providing freedom in abundance for all people. This school of philosophy offers possibilities that can in large measure solve the pressing problems arising from the war and from economic inequality. We now have the techniques for producing an age of plenty after this global war if we can conceive of workable means of organization and of distribution.

Whatever may be the final philosophies which the various secondary schools of America may choose, the need for some deep and fundamental study at this point is close to the top in priorities at the present time if we expect to come out of this war ready for the world which is to come.

The Strategy of Truth

LIAM O'CONNOR

Special Assistant to the Director of Domestic Operations, Office of War Information, Washington, D. C.

TRUTH, it has been said, is the first casualty of war, and the propagandist is the assassin. According to this view, the propagandist is essentially a liar; he uses the lie to mislead the enemy, to deceive his own people, to secure the aid of neutrals and allies. He has one aid, as Goebbels puts it, "the conquest of the masses. Every means that serves this end is good."

Hitler is in full agreement with his Minister for Propaganda and Public Enlightenment. He believes that the propagandist should not only qualify as a liar but that he should be as big a liar as possible. Hitler's Principle of the Big Lie is stated in *Mein Kampf*. There we read that it is a "very sound principle" that "a definite factor in getting a lie believed is the size of the lie . . . for the broad mass of the people in the primitive simplicity of its heart more readily falls victim to a big lie than to a small one."

The United States government emphatically does not subscribe to this concept of the nature of the propagandist. It does not believe that a declaration of war necessarily implies a moratorium upon truth and an open season for specialists in the colossal lie. On the contrary, the Office of War Information was set up, in the language of Executive Order 9182, "in recognition of the right of the American people and of all other peoples opposing the Axis aggressors to be truthfully informed." The comment of Elmer Davis, Director of OWI, upon this Order is unequivocal: "We even intend to see to it that the enemy peoples are truthfully informed, because we believe the truth is on our side, not only as to the nature and issues of the war, but as to who is going to win it. We cannot profess that we are going to tell the whole truth, because some things must be held back on the ground of military security; but we are going to tell nothing but the truth, and we intend to see that the American people get just as much of it as genuine considerations of military security will permit. . . . Propaganda . . . is an instrument which may use truth or falsehood as its material, which may be directed toward worthy or unworthy ends. We are going to use the truth, and we are going to use it toward the end of winning the war. . . ." In short, we are determined to fight the enemy's strategy of lies with our strategy of truth.

PHILOSOPHIES HELD

But this is more than a conflict of strategies. Each of these strategies is based upon a philosophy of man. Those philosophies are radically opposed one to the other. Thomas Jefferson stated the conflict clearly: "Men by their constitution are naturally divided into two parties. Those who fear and distrust the people, and wish to draw all power from them into the hands of

the higher classes—those who identify themselves with the people, have confidence in them, and cherish and consider them as the most honest and safe, although not the most wise, depository of the public interests. In every country these two parties exist; and in every one where they are free to think, speak, and write, they will declare themselves.”

The essential conflict, therefore, is between an illiberal conception of man and a liberal conception; between the Fascist notion that the average man is a boob to be manipulated unscrupulously by an “elite,” and the democratic idea that every man has the right to think his own thoughts, speak his own mind, and live his own life—so long as he has a proper regard for the rights of others—in his own way.

The Fascists have not bothered to hide their contempt for the common man. Hitler’s *Mein Kampf* states that “The intelligence of the masses is small, their forgetfulness is great.” Goebbels echoes this opinion. “The ordinary man,” he says, “hates nothing more than two-sidedness, to be called upon to consider this as well as that. The masses think simply and primitively.”

It is true, as Thomas Jefferson pointed out, that the average man is not an intellectual giant. The average man himself would be the last to make any such pretension. But it is also true that the present limitations of popular thinking should by no means be regarded as final and unchangeable. Universal education has produced slow but profound changes. The average man of today is different from the average man of the sixteenth century in at least two respects. He knows more for one thing, much more; it is a commonplace that even the contemporary schoolboy has a greater fund of verified knowledge than the learned men of an earlier day. And the man in our streets, having made the life of reason in some measure his own, having thereby bettered his financial and social standing, is eager to know still more; our huge educational system is compelling evidence of his respect and desire for education. Any government that attempts to arrest this process of emancipation of the common man from ignorance and error, any government that tries to destroy rational thought by appeals to mass hysteria and mass violence, any government that does these things in order that man may more easily be exploited is no more than a cancer upon the body politic. The governments of Germany and Japan *are* cancers, cancers that now threaten those rational and liberal values which are integral parts of our way of life and for which every believer in democracy must have a religious regard. We have taken the scalpel in hand; we will destroy these cancers, or they shall destroy us.

BASIC QUESTIONS THAT MUST BE ANSWERED

But, it may be asked, can this strategy of truth be concerned only with truth? Must there not be, in addition to appeals to the intelligence, appeals also to the emotions? Are such emotional appeals not demanded if effective

action against the enemy is to be secured? And, are not such emotional appeals destructive of truth itself?

These are basic questions and they must be answered. We deal in facts, the facts which we and our Allies must have to understand this war and to bring it to a victorious conclusion. We deal also in the background information without which facts have little or no meaning. This material must be presented, not only at home, but to widely different publics abroad. Abroad we must assure the French intellectual, the Chinese businessman, and the Filipino peasant that there are good reasons still to hope, good reasons still to fight on; we must convince neutrals and wavering satellites of the Axis that our cause is just and that it has the strength to prevail; we must speak to the Nazi official in Berlin and the Japanese official in Tokyo and make them realize that a time of reckoning draws nearer every day. We have outposts in Allied countries which handle the material sent from here and also supplement it with material which they prepare and distribute to neighboring areas. As the director of OWI has pointed out, "By encouraging our Allies, convincing the neutrals, and sowing doubt and confusion among our enemies, they are making their contribution to the eventual victory of our Armed Forces." In adapting our information to the cultural backgrounds of different groups we are following the excellent precedents set by Benjamin Franklin and by Woodrow Wilson. If we are to be sure that our message is understood by all peoples, if we are to be sure that the emotional values of this message of hope and defiance of aggression are properly appreciated, we must make these adaptations.

Information which is not understood, which arouses no strong feeling, obviously cannot lead to action. But—and this is an all-important qualification—the emotional weight of our materials must never be permitted to destroy the accuracy or proper proportion of our information. Were this to happen, we should lose the confidence of those whom we wish to persuade—confidence which is vital to our successful operation. To a dealer in the truth even the appearance of telling a lie can be fatal.

At home the situation is somewhat different. We are not speaking here to strangers, even to strangers bound to us by the brotherhood of arms but whom none the less we must make some effort to understand. No, we speak here to our own, to our relatives and friends, to the members of that great household, the United States. Between members of the same household there is no need for carefully composed speeches. Simple words, plainly spoken, are enough. Indeed, any attempt on the part of any government agency to "sell" the war to Americans by, for example, the crass methods of the circus barker would be a monstrous inpertinence. We have all made investments in this war, the investments of the flesh and blood of fathers and sons, of brothers and sisters. On far-flung battlefronts, from Guadal-

canal to Kiska, from the British Isles to North Africa, these men and women are facing the enemy; they are enduring privation and wounds and disease. At this very moment some of them are dying. Others will return, later, broken in mind and mutilated in body. We who wait for news of those who are dear to us, we who live with them in our dreams though the distance of half the world divides us, do not need to be "sold" this war. What we do need is the unvarnished truth, the truth which will help us to produce more tools of combat, grow more food, and sacrifice more of our time and energy and money so that our ultimate victory will be the more speedily assured.

AN EXAMPLE OF DIFFERENCE IN STRATEGY

An example or two may help to show more adequately how our strategy of truth differs from the enemy's strategy of lies. You will recall the agreement between Great Britain and ourselves in August, 1940, whereby British bases in this hemisphere were traded for some of our destroyers. Completely contradictory interpretations of this event were broadcast by the Nazi radio to various audiences. The German home front was informed that the agreement proved the weakness of the British since, as the announcer put it, "They are selling out the Empire for scrap iron." The United States was told, however, that the deal was a sign of British strength, because it was in reality the beginning of a process by which we should revert to the status of a British colony. But this alleged United States weakness was transformed into United States strength for listeners in French Canada, in Latin America, and in Great Britain. To French Canadians and Latin Americans it was said that Yankee imperialism was now about to dominate the entire Western Hemisphere. To listeners in Britain went the charge that the United States was plotting to prolong the war by inadequate assistance in order that the British Commonwealth should at last become the United States Empire.

Here we have complete disregard for facts, for consistency, for honesty. There is no attempt at all to tell the truth, but merely a cynical use of whatever statement seems most likely to be in accord with the prejudices, the hopes, and the fears of a given group. This is the Principle of the Big Lie in actual operation.

Lies such as these are broadcast twenty-four hours a day from the short-wave stations of Germany, Italy, and Japan. Each transmission is beamed at a definite target in the appropriate language or dialect. A brief outline of how our strategy of truth is employed against this steady barrage of falsehood will suffice. We have a short-wave monitoring service which enables us, day by day, to keep tabs on what the enemy is saying. Foreign-language experts listen to his broadcasts, transcribe and summarize them. The transmissions are then classified and analyzed. Within a few hours of the original reception it is possible for us to expose the enemy's contradictions, distortions,

admissions, and omissions over our own short-wave stations in some thirty languages, and to deflate his lies, no matter how astronomical in size they may be, with the truth.

We have hit the enemy in a vital spot, and we have hit him hard. He had made some attempts to answer our exposures of his lies—but, as the proverb puts it, a lie has only one leg; the more a liar tries to justify himself the more hopelessly does he become involved. He had been compelled to forbid listening to our broadcasts among his own nationals and among the population of occupied countries, and to punish violations of this prohibition with death. There could be no more eloquent proof than this of the impotence of a propaganda of untruth. It is significant that this impotence was recognized in an official German publication as early as 1936. I refer to the "*Handbuch der neuzeitlichen Wehrwissenschaften*" ("Handbook of Modern Military Science") published in that year under the sponsorship of the German Society for Military Politics and Military Science. The volume was edited by Major General Franke. It declares: "even the most obvious untruthfulness is readily believed by the unsuspecting masses of the population. But lies have short lives and their poisoned arrows may fall back on him who used them first. Therefore, sound propaganda, made to last, must use only statements which are based on facts, and which will increase the confidence of public opinion. . . ." Hitler would have done well to have listened to these words of warning in 1936. He put his trust instead in his Principle of the Big Lie. Today we are shooting his poisoned arrows back at him. And the poison that he himself distilled is now working upon him.

Let me give you another example. Shortly after our entry into war Tokyo Rome, and Berlin launched by short-wave a concerted campaign against religious groups. The aim was a familiar one—to divide and conquer. On its beam to South America, Tokyo stated that Protestants and Jews in the United States were banding together to exterminate Catholicism below the Rio Grande. Rome supplemented this by telling North America and Eire that the "Protestant tyrant Roosevelt" had landed troops in Northern Ireland for the purpose of wiping out Catholicism in Eire. Berlin, however, assured us that President Roosevelt was a "second Moses." Tokyo claimed that more than fifty Protestant leaders had pledged co-operation with the Japanese forces; not one of these leaders was named. Tokyo also alleged that Archbishop O'Doherty of Manila and Catholic missionaries in Hong Kong had approved the Japanese occupation of Manila. Berlin made frequent mention of its "mobile churches" for German troops in Russia. Tokyo outdid all competition in a broadcast to the Filipinos. The announcer solemnly proclaimed: "When the Japanese entered Manila, the natives said: 'The angels have come. The angels we have awaited so long have now descended.' . . . Church bells are striking, their merry notes pealing out to the land."

The divisive intention of these bare-faced lies were unmistakably clear. We at once made the facts known to the religious press and radio. With one voice, from coast to coast and from border to Gulf, the religious press and radio castigated these lies; with one voice they proclaimed the unity of Protestant, Catholic, and Jew against Axis aggression; with one voice they proclaimed that religious groups were determined not to be divided, not to be conquered. The general press and radio joined in the chorus. So also did the domestic foreign-language press and the domestic foreign-language radio. Then, on our short-wave transmitters, in all the major languages of the world and even in languages and dialects comparatively little known, we reported this united defiance to Axis duplicity of the organized spiritual forces of America.

The effect was dramatic! For the moment Tokyo, Rome, and Berlin dropped their particular attack. Their sudden silence on the subject was profound.

This decisive defeat did not permanently discourage the enemy, however; it merely taught him that religious groups are not as *naïve* as he had imagined. Since then he has returned to the attack, not once but again and again, using methods a good deal more subtle. With the help of the organized press and radio of the country—especially that of the Catholic, Protestant, and Jewish services—we have met these recurring attacks and we will continue to meet them. We cannot afford to relax. We must not forget for a moment that the enemy wants to create war between Protestant and Catholic, that he wants to turn both Protestant and Catholic against the Jew. We must remember that his grand strategy is to divide us among ourselves, and to divide us from our Allies, particularly from the British and the Russians. Only by unceasing and aggressive vigilance, only by an adamant skepticism toward all appeals addressed directly or indirectly to narrow group partisanship, only by faith in the American ideal of freedom and justice and brotherhood for all shall we survive.

TWO MAJOR FACTORS FOR SUCCESS

This conflict of ideas and ideals in which we are now engaged is a vital part of this people's war, certainly no less important than the military and economic phases of the entire struggle. War in all its aspects, military economic and psychological, is now total; of iron necessity we are all, each and every one of us, involved. This means, clearly, that no government agency such as the Office of War Information can fight the war by itself. Our job does not end with the issuing of releases. That is merely the beginning of our task. We are dependent for success upon two major partners; if either one should not support us, failure would be inevitable.

The first of these partners is the free press and other communication facilities of the nation. We do our best, within the framework of the policies

determined upon by the President and the Congress, and under the limitations imposed by the need for military secrecy, to serve these information channels. We try to prevent avoidable conflicts in information issued by other government agencies. In our co-operation with these agencies, some honest difference of opinion is unavoidable. Since we are not in the censorship business, we do not try to hide these differences of opinion. Any newsman is free, under our open-door policy, to check and re-check any story of ours and to call us to account if we have made an error. Our duty, in short, is to provide to the people, so far as possible through the existing channels of public communication, as complete and accurate a picture of this war as is humanly possible. The duty of those who control these channels is to pass on to the people what we have to report—but only if they are satisfied that no better report can be secured. Our relationships with these media is not that of “I give and you take” but rather one of democratic give-and-take on both sides.

Our second partner is the people themselves—the people of this nation and the people of all the United Nations. This, of course, is by far the most important partner of the three, for if the common man in this country and in the countries allied with us be not convinced of the rightness of our cause, if he be half-hearted or irresolute in action, then the other two partners find their days numbered and their fate an ugly one.

Here, too, we strive for a relationship of give-and-take. True, it is difficult for our Allies in the occupied territories to talk back, but it is not impossible. The information which we send to them by short-wave, which we drop in pamphlets and leaflets from our bombers, appears, with comment, in the hundreds of underground newspapers which now flourish in the occupied territories. These underground papers reach our comrades despite the most repressive measures of the enemy. They also reach us. In this way, and by other means as well, we are in communication with our captive Allies. We know that they are thinking and feeling and working with us, and that they are waiting for the opportunity to strike with us in force.

We need not urge the American people to talk back; they will do so without coaxing from us; they will do it individually, through their press and through their Congress. We welcome this criticism, favorable and unfavorable alike, for it is an organic part of that democracy for which we fight. We welcome it, too, because it is a measure of our success or failure in what we have so far attempted. We welcome it, finally, because it is an index, clear and imperative, of what still remains to be done in this war of the common man against tyranny.

The National Association of Student Councils

¹The Advisory Committee of the National Association of Student Councils: Miss Bertie Backus, Principal, Alice Deal Junior High School, Washington, D. C., (Chairman); Miss Alice G. Langford, Student Activities Advisor, B. M. C. Durfee High School, Fall River, Massachusetts; Galen Jones, Principal, East Orange High School, East Orange, New Jersey; Miss Adeline M. Smith, Former Head, Social Science Department, Bloom Township High School, Chicago Heights, Illinois; Wayne Thomason, President, National Association of Student Councils, Columbia, Missouri; Paul E. Elicker, Executive Secretary, National Association of Secondary-School Principals, Washington, D. C. (*ex officio*).

THIS NATIONAL ASSOCIATION OF STUDENT COUNCILS first took organizational form at the annual summer convention of the National Education Association in 1931. It was also known as the National Association of Student Officers. As a national organization, it is in its youth, relatively; but the general purposes for more effective and democratic school administration have been significant in secondary education. Annual conventions of students, representing student councils, have been held until 1942, after which wartime restrictions on travel made assemblages for national conventions inadvisable. At the last convention, held in Denver, Colorado in June, 1942, the following student officers of the National Association of Student Councils were elected:

PRESIDENT	WAYNE THOMASON, COLUMBIA, MISSOURI
VICE PRESIDENTS	GEORGE HALEY, ATLANTA, GEORGIA WILLIAM WELCH, DENVER, COLORADO STUART THAYER, CHARLESTON, WEST VIRGINIA WILLIAM CHAPMAN, ST. CLOUD, MINNESOTA
SECRETARY	MILDRED TERRAR, COFFEYVILLE, KANSAS

The fundamental idea of student government, or rather student co-operation or participation in school administration, is not of recent origin. Since 1900, there has been ever-increasing interest and development of many plans in schools, locally and state wide, for student participation in school and student management as a way to democratize school administration. This national organization grew out of a sincere desire to meet a need in the local schools. The National Association of Student Councils has had the guidance and support of many individuals and educational groups, teachers, sponsors of student councils, student council officers, principals, superintendents, and national groups, such as the National Association of Sponsors of Student Participation in School Administration and, now, the National Association of Secondary-School Principals.

The growth, nationally, of the National Association of Student Councils represents the development of the functional concept of co-operative endeavor in school administration. Now, a new milestone has been passed and school administrators can be brought into closer relationship with the co-operative management of student activities through their national professional organization, the National Association of Secondary-School Principals.

At Denver, Colorado, in 1942, executive action was taken by the National Association of Student Councils and its sponsoring organization, the National Association of Sponsors of Student Participation in School Administration, to

have the National Association of Secondary-School Principals become the sponsor of the National Association of Student Councils. Terms of understanding given below were formulated and approved by the Executive Committee of the National Association of Secondary-School Principals on March 30, 1943, and the National Association of Sponsors of Student Participation in School Administration, May 31, 1943.

PLAN OF ORGANIZATION AND OPERATION

The National Association of Secondary-School Principals will become sponsor of, give direction to, and maintain control over the National Association of Student Councils in accord with these general terms of agreement. The National Association of Sponsors of Student Participation in School Administration will continue to be an advisory agency, as here specified.

I. Sponsorship, Direction, Control, Purpose

1. The present organization of National Association of Student Councils will be given necessary guidance and sponsorship to achieve its stated objectives and to realize more fully its purposes under the direction and control of the National Association of Secondary-School Principals.
2. The National Association of Secondary-School Principals accepts the general aims and purposes of the National Association of Student Councils in general accord with its constitution of April 1939, as hereafter stated.
 - a. To foster in the secondary schools of the United States, through their authorized student activities, the spirit of responsibility, leadership, personal growth, civic-mindedness, self-discipline, and devotion to the ideals of education and democracy.
 - b. To provide a national organization which will serve as a clearing-house to regional, state, sectional, and local student organizations; provide a means whereby a fully balanced and integrated school program may be achieved; promote and develop acceptable standards for student participation in school life.
 - c. The present organization of the National Association of Student Councils will continue with such modifications as the Advisory Committee finds advisable in directing the affairs of the Association under the sponsorship of the National Association of Secondary-School Principals.

II. Activities of Organization

1. That the present activities of the organization be directed toward a greater effectiveness in local schools and in the state or regional organizations.
2. That the national assemblage (when resumed after close of the war) take on the nature of a conference of participating delegates of state or regional associations.
3. That the limit of the number of delegates in attendance at national conventions be determined by the Advisory Committee.

III. Finance

1. That all financial obligations and responsibilities be assumed by the National Association of Secondary-School Principals on a budgetary allotment as are all other activities of the association.

IV. *Dues*

1. The dues per member school should be \$5 or \$4 or \$3 per year, according to size of school, and such membership includes the sponsor of the school student council. There shall be three classes of membership to be known as (a) L (large), 1,000 enrollment or larger (\$5.00); (b) M (medium), 300 enrollment and less than \$1,000 (\$4.00); and (c) S (small), less than 300 enrollment (\$3.00).
2. Each school will receive two subscriptions to *Student Life* and other National Association of Student Council bulletins.
3. *Student Life* will be the official organ of the National Association of Student Councils.
4. Any person interested in the general field of student participation in school administration may have membership in the National Association of Secondary-School Principals on payment of the annual fee of \$3. He will be known as an Associate Member and will be entitled to full membership privileges except the privilege of voting and holding office. He will receive the regular publications issued to all members.

V. *Name*

The name of the organization shall be the National Association of Student Councils of the National Association of Secondary-School Principals.

VI. *Administration*

1. The National Association of Secondary-School Principals, through its Executive Committee, shall have the general responsibility for the functioning of the National Association of Student Councils, acting upon the recommendations of the Advisory Committee of the National Association of Student Councils.
2. An Advisory Committee¹ will be selected to formulate the policies and procedures for the operation of the National Association of Student Councils and make recommendations to the Executive Committee of the National Association of Secondary-School Principals.
3. The Advisory Committee shall consist of five members, two to be appointed by the National Association of Secondary-School Principals, each for a term of four years, and two from the National Association of Sponsors of Student Participation in School Administration, at least one to be a student council sponsor, each for a term of four years, and the president of the National Association of Student Councils, or any officer of the National Association of Student Councils. The executive secretary of the National Association of Secondary-School Principals is a member *ex officio* of the Advisory Committee.

ADVISORY COMMITTEE MEETS

The Advisory Committee of the National Association of Student Councils met in Washington, D. C., on October 10, 1943. The meeting was attended by: MISS BERTIE BACKUS, *Principal*, Alice Deal Junior High School, Washington, D. C.

PAUL E. ELICKER, *Executive Secretary*, National Association of Secondary-School Principals, Washington, D. C.

GALEN JONES, *Principal*, East Orange High School, East Orange, New Jersey.

MISS ALICE G. LANGFORD, *Student Activities Advisor*, B. M. C. Durfee High School, Fall River, Massachusetts.

MISS ADELINE M. SMITH, *Former Head, Social Science Department, Bloom Township High School, Chicago Heights, Illinois.*

Among the proposals were the following:

1. All efforts at any time to effect an organization for youth should have their origin and stimulus from the present educational organizations—the schools of America.

2. The most effective student organizations now are the authorized student organizations in our schools, such as student councils or student organizations.

3. The control and direction of such school organizations should always remain with the school and faculty officers of local schools, state educational organizations, and national educational organizations.

4. During the present emergency, the efforts of the National Association of Student Councils should be directed toward the establishment of a firm foundation for effective operation in local schools and for the promotion of plans to strengthen the operational relationship of student organizations in our schools through the state student council organizations and the state secondary-school principals' associations.

5. The National Association of Secondary-School Principals will act as an advisory and co-ordinating agency and serve as a central clearing agency for all worth-while student activities. The publication, *Student Life*, is devoted to this purpose; and other publications of the National Association of Secondary-School Principals will be issued to serve schools and state organizations in the general area of student activities.

THE PROPOSAL TO SCHOOLS

You can give your support and indicate your interest in the activities of school student councils by enrolling your school and the sponsor of the student council in the National Association of Student Councils through the office of the National Association of Secondary-School Principals, 1201 Sixteenth Street, N. W., Washington 6, D. C. For particulars about activities and dues of this National Association of Student Councils, consult Sections II (Activities) and IV (Dues) above.

School enrollment now for regular annual fee will not expire until June 30, 1945 (16 months). Use enrollment blank on last page of this issue of *The Bulletin*.

Work Experience and Secondary Education

A Report of a Conference Edited by

PAUL B. JACOBSON

University of Chicago, Chicago

B. L. DODDS

Purdue University, Lafayette

FOREWORD

A CONFERENCE was held at Purdue University, November 14 and 15, 1943. It grew out of the interest that many school people are evidencing in the educational possibilities potential in the work experience that is so readily available today to secondary-school youth. It seemed that today is a particularly appropriate time to consider more specific ways and means by which the school might aid youth in profiting educationally from work experience.

The following report is the work of some thirty-eight school administrators from Indiana and Illinois representing both the fields of general and vocational education. This group devoted their time attempting to (1) identify the major problem areas in the field of work experience, and (2) determine appropriate policies and promising procedures for directing a work experience program.

PRELIMINARY ASSUMPTIONS

The conference accepted the following four assumptions which underlie the recommendations stated in detail in the body of this report.

I. *Every able and willing boy and girl has the right to earn a high-school education.* Ever since Count's pioneer study twenty years ago, it has been known that children from favored economic classes have entered school to a greater extent, and have persisted in school longer than children from the less favored economic groups. Other studies have indicated similar conditions. The study of youth in Maryland by the American Youth Commission indicated that the best single index of persistence in the secondary school was the occupation of the father.

Research indicates that it costs on the average somewhere more than \$80.00 for a boy or girl to attend the "free American high school" for one year. For wealthy parents such an expenditure is not a matter of concern. For those with incomes of \$1800 or less such expenditures for two or three children are a matter for serious consideration. For families with annual incomes of \$800 or less the expenditures connected with high-school attendance are impossibly large. Unless some way is found whereby able and willing boys and girls from the low-income groups can earn the money necessary to attend high school with decency, the school will not serve a democratic representation of the nation.

II. *The second assumption is that learning how to work is one of the "developmental tasks" for young people.* There are a series of such developmental

tasks. Among them, is learning how to get along with age mates of the same and opposite sex. The skills and understandings necessary for conduct expected in our society is another developmental task. Learning how to work or preparing for a vocation is still a third. This conference was concerned primarily with learning how to work as one of the developmental tasks. It is an obligation of the community or of society to furnish young people with an opportunity to learn how to work. The school is in a particularly advantageous position to assist in this process since a large number of young people are enrolled in the high schools. The present time when jobs are plentiful is a particularly propitious time to make work part of the school of organization so that it will persist in the postwar period. Many schools from New York to California have made promising beginning.

III. *Articulating a work and study program in a school's organization makes it more difficult to administer a school.* Twenty-five years ago extracurriculum activities were coming into the schools. They, too, made the schools more difficult to administer and they made the school more valuable. Just as there were "headaches" in developing an extracurriculum program in the high school so there will be "headaches" in developing a study-work program.

IV. *The issues and difficulties involved in providing work experience can be solved.* The work of this conference was to break down the major issues into smaller ones and to determine ways in which they may be attacked and ultimately solved. This conference identified four problem areas which are given consideration in this report:

- A. The objectives of work-experience programs
- B. School activities related to a work-experience program
- C. Proposed administrative techniques
- D. Evaluation of work experience and standard for work-experience programs

THE OBJECTIVES OF WORK-EXPERIENCE PROGRAMS

I. *For all pupils, regardless of special interests and needs, work experience should contribute to:*

- A. Developing of a sense of responsibility
- B. Building of self-reliance and self-confidence
- C. Acquiring of respect for honest labor (consistent and sustained)
- D. Learning how to work co-operatively with others
- E. Building an understanding of the qualities, characteristics, and attitudes required by commerce and industry
- F. Developing thrift in the use of time and money
- G. Providing exploratory experience in real work situations
- H. Providing added meaning or improved motivation for school activities as a result of work experience

II. *For pupils with special interests and needs, work experience should contribute to:*

- A. Acquiring skill and experience in a chosen field of endeavor
- B. Making possible continued school attendance while earning:
 - 1. By encouraging those who have dropped out of school to return to school and continue their education
 - 2. By encouraging students to stay in school in order to complete their secondary-school program
- C. Helping students to earn money for their own needs and at the same time make an economic contribution to society through useful productive work

III. *Through all of the means used to accomplish the preceding objectives should be woven the thread of better American citizenship.*

SCHOOL ACTIVITIES RELATED TO A WORK-EXPERIENCE PROGRAM ASSUMPTIONS

I. *The related program of activities should be directed toward the development of skills, knowledge, and attitudes necessary for occupational adjustment.*

II. *The primary need is for a program of activities for occupational adjustment of youth who are not enrolled in the organized and specialized vocational programs.*

III. *The school's activities in an occupational adjustment program should vary according to the needs of:*

- A. Youth, who are in school full-time, but will soon enter some form of employment (pre-employment training)
- B. Youth who are attending school and employed part-time. (parallel training)
- C. Youth who are in full-time employment and who return to school for supplementary education. (supplementary training)

Suggested Activities

In a comprehensive program of occupational adjustment each school should select and provide for those activities which are appropriate in the light of the need of students enrolled and the facilities which can be provided.

I. *General Course in occupational adjustment* (primarily pre-employment).

Such a course should include among other things:

- A. Types of commercial, industrial, and agricultural enterprises
- B. Labor and employer organizations
- C. Government agencies related to worker
- D. Fields of employment
- E. Means and methods in finding employment
- F. Prerequisites for holding a job

II. *An orientation course on machines and processes used in commerce, industry, and agriculture* (primarily pre-employment).

The primary purpose of such an orientation course would be to develop the ability to identify and understand the use of occupational machines. Preliminary training in the operation of such machines to be provided insofar as time and facilities are available. (Such a course may provide instruction somewhat similar to that provided in many programs in general shop).

III. *Group and individual conferences and projects related to work experience of youth* (parallel to actual work experience).

These conferences and projects could be related to such matters as the following:

- A. Analysis of requirements of specific job in which youth is employed—standards of performance, work, and personal habits acceptable on particular job
- B. Analysis of supervisory and working relations on the job (relation to employer, foreman, and fellow-worker)
- C. Analysis of relation of individual worker to employee organization
- D. Analysis of opportunities in specific job in which youth is employed—Opportunities for advancement, wage schedule, working conditions, requisite future training, and personal aptitude
- E. Planning personal budget for income received from specific job in which youth is employed
- F. Planning a personal time budget adjusted to youth's specific job
- G. Analysis of relation to social security provisions
- H. Economic and social significance of the youth's job

IV. *Provision in the regularly organized courses for instruction. Related to work experience of employed youth.*

PROPOSED ADMINISTRATIVE TECHNIQUES

The school must be concerned with the placement and supervision of in-school workers in all fields of work, both general and vocational, in the immediate emergency, but more particularly with the work outlook in the post-war period.

I. *A local, representative policy committee should be formed.* Close association is necessary with the USES, labor, management, and other community groups concerned with young people.

II. *Management should be interested in the program:*

- A. By an educational program intended to secure a broader interest than is now being generally evidenced by management
- B. By working with management to discover the social as well as economic factors involved

- III. *Labor should be encouraged to participate actively in policy forming:*
 - A. By including representation on the central planning committee
 - B. By keeping labor adequately and completely informed of policies
 - C. By endeavoring to understand and appreciate the problems of labor
- IV. *The program should be kept under the control of the local board of education:*
 - A. By pointing out that it is possible to have Federal aid without Federal control
 - B. By being alert to local needs and by meeting these needs before other agencies are set up to fill them
- V. *Desirable techniques in setting up a work program may include the following:*
 - A. Interpret and discuss the proposed program with the entire high-school staff
 - B. Interpret and discuss the proposed program with industry, business, management, labor, and agriculture
 - C. Interpret and discuss the proposed program in the community
 - D. Set up a representative committee
 - E. Provide personnel to do the job of placement, supervision, and follow-up adequately
 - F. Set up co-operatively with employment managers policies of the work program and interpret thoroughly to the public
 - G. Arrange for specialized short-time training courses for seasonal or short-time employment
 - H. Keep in touch with the labor market and conditions of work and employment through planned visits
- VI. *The program should be centralized and controlled:*
 - A. By functioning through a central authority and duly appointed representatives by the board of education, upon the recommendation of the superintendent of schools
 - B. By re-allocating staff members to provide for the administration and supervision of the program

EVALUATION OF WORK EXPERIENCE AND STANDARDS FOR WORK-EXPERIENCE PROGRAM

Work experience should be a part of the process of growing up for all youth.

I. *Suggestions relative to vocational work experience*—It is recommended that it be the practice of giving credit, which will count toward graduation, for work experience associated with vocational courses, both Federally re-im-bursed and not re-im-bursed under the conditions herein set forth:

- A. When opportunity for educational growth is equivalent to that provided in the classroom, laboratory, or shop

- B. When the work has been approved in advance by the school and validated by supervision and adequate testing at the end of the work
- C. In any field recognized by the state course of study

II. *Suggestions relative to general work experience.* It is recommended that:

- A. Schools collect information on the number of young persons employed, both those in work associated with the established vocational courses and those engaged in more general work experiences
- B. A liaison officer be employed to co-ordinate the school and employer
- C. Schools follow up such general employment with a liaison officer such as a counselor, dean, or co-ordinator, who should check up on all students at work and discuss problems with both the student and employer
- D. Schools keep a record of the work experience of each pupil and make it a part of the cumulative permanent school record
- E. Youth should be counseled and encouraged to upgrade themselves
- F. That students work with faculty members in developing evaluative criteria for student work experience
- G. That credit for general work experience await the collection of more experience and information

III. *Suggestions relative to conditions for student workers.* It is recommended that a record form be developed on which the employer may check the work habits and evaluate the effectiveness of the employee. The following are suggested items:

- A. How well the student-employee accepts suggestions or directions
- B. How well the student-employee gets along with other employees
- C. How punctual, reliable, and trustworthy the student-employee is
- D. Whether or not the employer would re-employ or recommend employment to others

- E. A rating on initiative, co-operative relations with customers or public, courtesy, tact, cleanliness, and personal appearance
- Students 16-18 years of age ordinarily should not work more than four hours on school days or eight hours on Saturday, Sunday, and holidays, and in no case should the school-work day exceed ten hours

For students between 14-16 years of age the combined school-work day should not exceed 8 hours

Students 16-18 years of age should not work later than 10:00 P.M. unless they are able to commence their school work the next morning not earlier than 9:00 A.M.

For students between the ages of 14 and 16 the hours of school and work should be between the hours of 7:00 A.M. and 7:00 P.M.

LIST OF CONFERENCE PARTICIPANTS

Discussion Leader—Paul B. Jacobson, University of Chicago

Committee on Objectives

- W. Fred Totten, *Chairman*, Principal, High School, Marion, Ind.
R. J. Brannock, Principal, High School, Lowell, Ind.
Loren Chastain, Principal, High School, Columbus, Ind.
J. Dan Hull, Principal, Shortridge High School, Indianapolis, Ind.
Glen S. Kropf, Principal, Riley High School, South Bend, Ind.
G. F. Weber, Director, Vocational Education, South Bend, Ind.
J. C. Jenkins, Director, Vocational Education, Muncie, Ind.
Jacob L. Jones, Co-ordinator, Arsenal Technical High School, Indianapolis.
M. F. Stigers, Division of Education and Applied Psychology, Purdue University, Lafayette, Ind.

Committee on School Activities Related to Work Experience

- Dennis H. Price, *Chairman*, Indiana State Teachers College, Terre Haute, Ind.
William C. Baker, Industrial Co-ordinator, Columbus, Ind.
Bruce B. Bell, Director, Vocational Education, East Chicago, Ind.
B. L. Dodds, Division of Education and Applied Psychology, Purdue University, Lafayette, Ind.
W. B. Hill, Division of Education and Applied Psychology, Purdue University, Lafayette, Ind.
Charles D. Hume, Industrial Co-ordinator, Logansport, Ind.
B. C. Lawson, Division of Education and Applied Psychology, Purdue University, Lafayette, Ind.
J. Lloyd Trump, Principal, Horace Mann School, Gary, Ind.
Walter J. Tucker, Industrial Co-ordinator, Marion, Ind.

Committee on Administrative Techniques

- R. D. Shaffer, *Chairman*, Principal, Central High School, Muncie, Ind.
C. L. Bigelow, Industrial Co-ordinator, Valparaiso, Ind.
L. H. Carpenter, Principal, High School, Wabash, Ind.
John W. Holdeman, Principal, High School, Elkhart, Ind.
John J. Matthews, Director, Vocational Education, Gary, Ind.
H. G. McComb, State Director, War Production Training, Indianapolis, Ind.
J. R. Mitchell, Principal, High School, Richmond, Ind.
Galen B. Sargent, Principal, John Adams High School, South Bend, Ind.

Committee on Evaluation

- R. F. Robinson, *Chairman*, Principal, Washington School, East Chicago, Ind.
F. L. Holmes, Superintendent, Maine Township High School, Des Plaines, Ill.
C. H. Lawshe, Division of Education and Applied Psychology, Purdue University, Lafayette, Ind.
R. D. Mead, Principal, Bloom Township High School, Chicago Heights, Ill.
E. T. Organ, Director, Vocational Education, Elkhart, Ind.
Charles Parriott, Director of Personnel, Maine Township High School, Des Plaines, Ill.
P. D. Pointer, Principal, Central High School, South Bend, Ind.
Paul Robertson, Employment Co-ordinator, High School, Richmond, Ind.
Edgar J. Spady, Director of Industrial Education, Richmond, Ind.
Guy Stanz, Principal, Gerstmeyer Technical School, Terre Haute, Ind.
Ammon Swope, Division of Education and Applied Psychology, Purdue Univ.

That List of Graduates

JOHN H. STARIE

Headmaster High School, Madison, New Hampshire

ACROSS the desk of any school executive comes a constant stream of appeals from other institutions, organizations, and agencies for lists of his graduating classes. Some, from private educational institutions, request these as a favor to higher education; others, from commercial bureaus who doubtless peddle the names for their own profit, being more frank, or perhaps more realistic, offer a payment for the names. This is usually couched in such a way that the principal whose professional ethics are questionable may disguise his acceptance in terms of "remuneration for clerical expenses."

The autumnal fluttering down of these leaves of higher education is an annual phenomenon; and the fact that many administrators respond to the many requests and comply with the practice would seem to be implied by the continuance of their arrival. In view of the pressure that exists upon high-school graduates of the present day to enter this or that service, or to fit themselves to do so by attending some school, it has seemed to the writer an opportune moment to examine the professional ethics and discuss briefly these ethical or unethical practices.

In these days when one's private life seems open to the scrutiny of any minor government official who chooses to mimeograph a form, we are perhaps in danger of losing sight of the idea that a man's name is his private possession, not to be handled loosely in fear of the law. To cry it aloud upon the marts of educational commerce would seem at least to be a breach of pedagogic confidence and courtesy. The mere fact that a pupil must place his name upon a school register gives a principal no right of disposal, much less of sale.

PROTECTING THE PUPIL

But if common courtesy to his pupils be no deterrent, the knowledge that he has no control over the ultimate use of the names should make even the most irresponsible principal pause. It would be *naïve* to assume that an agency that purchases names would not also sell. Those who have sought to guide their pupils through the maze of American economic life should hesitate before exposing them needlessly to the commercial pressures of those who buy lists of names of unsuspecting youth. A name sent out of a school office has passed beyond control of the school and may be washed by economic tides into unsavory surroundings.

Spaulding, in his study of the New York school system, *High School and Life*,¹ speaks urgently of the danger of the high-school graduate falling prey to the racketeering of unsound correspondence schools. If his criticism was

¹Spaulding, F. T. *High School and Life*. New York: McGraw Hill, 1939. 377 pp. \$3.00.

valid during the depression years, the competition for students among some institutions of learning and student interest in other commercial enterprises during the wartime scarcity makes it even more imperative that the graduate who seeks further training to fit himself for some war effort should be guarded from the clutches of the commercial racketeer. To be in any way responsible for his wasting time and effort, and perhaps in losing his zest for further education, even though it be engendered by the purest motive, would make any principal an educational saboteur.

GUIDANCE FOR THE PUPIL

Perhaps those who justify this practice, do so on the ground that it brings to the student's attention a larger number of schools than he would otherwise perceive. Doubtless this is true; but the quality of the schools is another question. Most educators would agree that the selection of a post-secondary school is an essential function of educational guidance, the culmination of a program that desirably began in the seventh grade. To be effective, such guidance should be a mutual undertaking shared between pupil and counselor and not left to the whims of the latest mailbag or some copy-writer's ecstasy. Educational guidance is fundamentally concerned with guiding the pupil to the school.

Surely the truth of this will be enhanced even more in the future, when returning soldiers and out-of-defense-workers seek more education to readjust themselves to peacetime economics. It is easy to imagine the scramble among commercial institutions to take advantage of this. If high schools should be given any share in this postwar guidance, their work would be aborted by a continuance of this practice.

The writer is well aware that there may be those who disagree with his stand and makes no apologies to them. It does seem, however, that this whole question could well be brought for review before our state and national conventions, whereby some common code of practice could be agreed upon. If, after careful consideration, the dissemination of names should be deemed worthy of a principal's time, it should be placed on a systematic basis and a high ethical plane. But if, as seems more probable, the practice were universally condemned, resolutions passed in convention might save schools and agencies from scattering acres of paper that should have a more worthy purpose in times like these.

ACKNOWLEDGEMENT

The January, 1944, issue of *THE BULLETIN* carried an article entitled, "A Centralized System of Accounting for Student Activity Fund." Quite a number of pictures of forms were included in this article. Cuts for these forms were graciously supplied by the State Department of Public Instruction, George L. McClenny, Supt., Topeka, Kansas. We erroneously failed to acknowledge our appreciation for these cuts when the article was published.

Orientation Program for Freshmen

MARJORY RONALDS

Freshman Class Adviser, Niles Township High School, Skokie, Illinois

BRIDGING the gap between eighth grade and high school is not a simple matter. Niles Township High School has 266 freshmen from 37 different elementary schools. Helping students, who have come from such a varied background, adjust themselves to a new community of school life requires much consideration and planning in advance. There are many steps in the orientation program at Niles Township High School.

An Eighth Grade Night program, to which the incoming freshmen and their parents are invited, is held in May. The guests are divided into three groups. Each group attends a section of the program for twenty-five minutes. The three parts of the program are presented in the community room, the gymnasium, and the natatorium. In the community room a panel discussion of questions and answers concerning the freshman year is conducted by a group of high-school freshmen, students who know best the difficulties and problems of the first year. Some of the questions asked and discussed are listed below.

1. Do freshmen get to choose their subjects?
2. How many major subjects are there?
3. What minors can freshmen take?
4. What is the difference between a major and a minor?
5. What does credit mean?
6. When do freshmen register for high school?
7. What type of exercises do they have in Physical Education classes?
8. What teachers will the freshmen have next year?
9. How much passing time is there between classes?
10. How do they know where to go on the first day of school?
11. Do freshmen ever get lost?
12. How do the teachers grade?
13. What is a home room?
14. How often do freshmen have assemblies?
15. How are they planned?
16. How many parties do freshmen have?
17. How is the lunch period spent?
18. Do freshmen have much homework?
19. What would be a typical week's program for a freshman?
20. Do freshmen have to bring notes from home after an absence?
21. What happens if you talk in study hall?
22. Are freshmen bothered by upper classmen?
23. What are some of the important things that a freshman must *not* do?

After their own discussion the group answers questions asked by the eighth graders and their parents. In the gymnasium the school's band and music groups present a musical program. In the natatorium there is an exhibition

mation concerning the pupils. The director of guidance obtains information from the reports which helps him in placing the border-line cases resulting from the mathematics tests.

EIGHTH-GRADE PUPILS VISIT THE HIGH SCHOOL

In addition to the visit of the director of guidance and class adviser to the grade schools, each eighth-grade class is invited to visit the high school during April or May. Each pupil is assigned to a freshman guide who takes him along with him to his regular classes. In this way the eighth graders have a preview of the freshman year in high school, as well as an early acquaintance with the location of the rooms in the school.

A freshman's program is arranged for him in advance. With the exception of a few who request a language, all freshmen take English, general science (boys' and girls' classes are separate), mathematics or algebra, business training for one semester and civics for the other, and a fifth period each day called the orientation period. At this time the pupils take their physical education twice a week, music once a week, the boys take shop and the girls take home economics once a week, and vocations one semester and art the other semester, once a week. A few students are given an opportunity to take remedial reading instead of one of the other minors. The minors program attempts to discover the student's aptitudes and to help him choose wisely his minors in his following high-school years.

Different groups under the guidance of the physical education instructors help in the socializing of freshmen. Boys who take part in football, basketball, swimming, track, and baseball have a good opportunity to become more widely acquainted with their schoolmates and to learn the rules of the game in sports. Freshmen girls may do the same by joining the girls' athletic association, the special tumbling class, and the bowling and horseback riding groups. Freshmen may join the cheer-leading group and the pep club.

The educational guidance program is chiefly in the hands of the director of guidance. In his vocations classes he has the following objectives:

1. To awaken the student to the need of making vocational choices.
2. To develop techniques for the study of occupations.
3. To develop techniques for self-analysis.
4. To develop techniques for the matching of the students' personality traits with the personal qualifications required by the job.
5. To help the student make wise occupational choices.
6. To aid the student in the choice of the high school curriculum most useful in fitting him for his chosen occupations.
7. To guide the student in his choice of elective subjects.

After the student has been in the vocations course several weeks he fills out a curriculum application sheet, an example of which follows.

Date _____	
1. _____	
NILES TOWNSHIP HIGH SCHOOL Curriculum Application	Curriculum (middle)
M. T. W. Th. F. Section Student	(last) (first)
I choose the _____	

NILES TOWNSHIP HIGH SCHOOL
Curriculum Application

M. T. W. Th. F. Section

Student

(last)

(first)

(middle)

I choose the

(do)

I (do not) plan to go to

Curriculum

(name of college or school)

32 semester units are required for graduation. Write the subject and number of semesters desired. Select enough to make 32 when added to the required in group A. Any subject offered by this high school may be chosen. Subjects and number of semesters offered not listed elsewhere on this sheet are: Adv. Algebra, 2; Trig., 1; Solid Geometry, 1; Aeronautics, 2; Adv. Typing, 2; Office Practice, 2; Shorthand, 4; Bookkeeping, 2; Wood Shop, 2; Elec. Auto Shop, 2; Advanced Shop, 2; Printing, 4; Mech. Drawing, 6; Art, 6; Music Major, 2; Dramatics Major, 2; Foods, 2; Clothing, 4.

Group B — College Preparatory

In general there are two basic sets of college admissions requirements:

Classical

1 foreign language
4 semesters, choice of:

Latin

French

German

Spanish

Mathematics — 4 sem.

including:

Algebra — 2 semesters

(do not count twice — see

Group A)

Geometry — 2 semesters

Lab. Science — 2 semesters

choice of:

Biology

Chemistry

Physics

North Central

Combine any 2 of
the following 3:

Language — 4 sem.

Math. — 4 sem.

Science — 4 sem.

Approved

(Asst. Prin.)

(date)

Transcribed to Curriculum Sheet

(clerk)

(date)

Total

(N.B. Wherever choices are noted above, indicate yours by putting a circle around the subject or group chosen.)

Exemptions from the above required subjects will be granted at the written request of the parents and the approval of the Assistant Principal. Please set forth the reasons for such request on the back of this application.

Signed

(Parent or Guardian)

1944]

ORIENTATION PROGRAM FOR FRESHMEN

87

Date _____
1. _____
2. _____
3. _____
(vocalional choices)

Group A — Core Curriculum Requirements

All students must take these 20 semester units:

Subject	No. of Sem. Units
English	8
Jr. Business Training and Civics	1
World History (if C.P.) or Geography	2
U. S. History	2
Problems	1 or 2
General Math or Algebra	2
General Science	2

The sheets are returned to the home-room adviser who checks them and advises with the student if he feels that better choices could be made. Next they are returned to the office of the director of guidance who rechecks them, advises further, and finally approves them. They are then returned to the home-room adviser who writes out the student's four-year course on the appropriate curriculum sheet. A copy of the curriculum sheet is filed with the director of guidance.

Thus it is of ready access to the adviser, the principal, and the teacher when there is occasion for its use. Having this record on file for each pupil in the school is found to be most helpful in later conferences with the pupil. Likewise when parents call for a conference, this form oftentimes becomes quite revealing to them. It becomes the means for developing a better spirit of cooperating between the school and the pupil and between the school and parents.

PHYSICAL EXAMINATION REQUIRED

A pre-induction physical examination is required of all freshmen. It consists of checking the heart, blood pressure, lungs, hernia, skin, eyes, ears, teeth, posture, feet, tonsils, adenoids, nervous diseases, thyroid, and menses. Vaccinations and immunity against diphtheria, scarlet fever, small pox, and typhoid fever are also recorded. In addition to the above examination by the school physician, each girl is weighed and measured for height each semester by the physical education teachers, and the reason for excessive loss of weight investigated. At the conclusion of the physical examination, a confidential report to the faculty is prepared by the physical education department on all cases of corrected vision, impaired sight, apparent deafness of either ear, rheumatic fever recoverers, heart murmurs, and special cases, and sent to each faculty member so that class adjustments on sight and hearing may be made and the energy and working ability of the other students on the list conserved for maximum class accomplishment. A copy of the physician's report on all unsatisfactory examinations is sent to the parents with the suggestion that they co-operate further with the school by carrying this report to their family physician for further examination. Students who are not able to take part in the regular physical education program are re-examined each year.

On the first day of school the class adviser visits each home room and welcomes all freshmen to Niles Township High School.

FRESHMEN FILL OUT QUESTIONNAIRE

Early in the year a questionnaire is filled out in the home rooms by all freshmen. Some of the information obtained is a duplication of that on the personnel reports, but this questionnaire provides a means of obtaining necessary information from those students who have come from schools outside of the community's elementary schools. Following is a copy of the high-school questionnaire.

NILES TOWNSHIP HIGH SCHOOL

Freshman Questionnaire

These questions are asked in order that the Class Adviser and Home-room teacher may know you better and be more successful in helping you. Your answers will be treated as strictly confidential. You may feel free, however, to omit any questions which you prefer not to answer.

Name _____

Last Name First

Home-room No. _____ Home-room Teacher _____

Address _____ Tel. No. _____

Street No.

Village

Graduate of _____ City _____

I. HOME BACKGROUND:

1. Date of birth: _____

month day year

2. How many members in your home at the present time? _____

NAME	Where Born	Living Deceased	Occupation	Where Employed	College Attended
	<i>City & State or Foreign Country</i>				

Father _____

Mother _____

Guardian _____

3. With whom are you living? Father and Mother? _____ Father? _____
Mother? _____ Guardian? _____

4. How many older brothers? _____ Sisters? _____ Younger brothers? _____
Sisters? _____

5. Mention others living in your home such as grandparents, uncles, boarders, roomers, etc.: _____

6. Have you brothers or sisters who have attended or who are attending this high school? _____ If so, name them _____

7. Have you traveled much? _____ If so, explain where _____

8. Is any foreign language spoken in your home? _____ If so what? _____

II. PERSONAL INFORMATION:

1. Do you earn money outside of school? _____ How? _____

Approximate number of hours per week? _____

2. Do your parents plan to send you to a 4-year college or university? _____
to a Commercial school? _____, or to a Trade school? _____

3. Have you any hobbies? _____ If so, what? _____

4. Have you ever had any serious injury? _____ If so, what? _____

5. Do you have trouble seeing? _____ Do you wear glasses? _____

6. Do you have trouble hearing? _____

7. Name your three best friends who are now attending N. T. H. S. _____

OTHER HOME-ROOM PROJECTS

A contest on *Know Your School* with the questions based on a pamphlet of information given to each student the first day of school is held in the freshman home rooms a few days after school begins. The home room having the highest percentage of correct answers wins the contest. The results from all home rooms reveal that the freshmen have been learning the customs and rules of their new school.

Emphasis is placed on becoming acquainted in high school and enlarging one's circle of friends. To encourage this idea two contests are held in the home rooms. In one contest the freshman in each room who writes the longest list of names of home room members wins. In the other, the freshman in each room who writes the longest list of names of freshmen outside of his home room wins. In both contests defense stamps are given to the winners.

Other home-room projects include: getting acquainted, parliamentary rule, defense-stamp sale, Red Cross campaign, a Christmas quiz, discussions of topics from *The Student Thinks It Through* by E. V. Perkins, school spirit, nutrition, and manners. The projects are discussed and planned in monthly home-room teachers' meetings and in the meetings of the Freshman Board of Advisers.

The Freshman Board of Advisers, or FBA, is the outstanding group of the freshman class. This organization is composed of the vice-chairmen of the home rooms and a secretary. It meets each Wednesday with the class adviser during the home-room period. It is the guiding committee for all freshman activities.

The freshman assemblies are planned around the orientation theme. They are on such subjects as football, school cheers and songs, parliamentary rule in home rooms, study habits, hobbies, first aid, manners, nutrition, and sophomore-year expectations. They are held once a month.

The freshman class has two parties during the year. The first is in November and the second one is in March. At each party there are games, dancing, and refreshments.

By means of the steps mentioned above, Niles Township High School helps its freshmen to bridge the gap between eighth grade and high school. The orientation program is still in its beginning stages, but as the school grows, it will undoubtedly expand and grow with the school.

Subscribe now to

STUDENT LIFE

The only National Magazine of its kind. A One-Year Subscription for one dollar. (\$1.00).

Send your order NOW to the

National Association of Secondary-School Principals
1201 Sixteenth St. N. W., Washington 6, D. C.

England's High School Victory Corps

FREDERICK L. REDEFER

Formerly Director,¹ Progressive Education Association, New York City

ENGLAND has no official High School Victory Corps sponsored by the central government as has the United States. This does not mean that England has no organized program for its youth in wartime. She has an extensive one and, on the whole, a well-organized program for young people. England's war services to youth are not tied up exclusively with schools, nor are their activities sponsored and staffed by educators alone. The reason for this is obvious. In England, the great majority of young people leave school at the age of fourteen so that any program that is carried on through the schools would reach only the fifteen per cent who continue schooling beyond fourteen. What does England have then that is comparable to our High School Victory Corps program?

Comparable to the Land, Air, and Sea divisions of our Victory Corps England has various pre-service groups: the Army Cadet Force (200,000²), the Sea Cadets (40,000²), and the Air Training Corps (220,000²). These various Corps are led by former Army men, sea captains, those who know something about aviation, and those who are interested in working with young people. In some localities a few teachers from local schools are members of the staffs of these Corps and teach various courses, very much along the lines of the courses suggested in the *U. S. Victory Corps Manual*. These pre-service groups meet two or three evenings a week for study and drill, and very often they assemble for tactical maneuvers on Sundays. Instructors and young people wear uniforms that are provided free of charge by the government.

I gained the impression that these pre-service groups in England are more successful in interesting the youth in Britain than are their counterparts in the United States. Is it the uniform that does it? Is it the fact that their leaders are not the "school teachers"? Is it that the majority of young people are not school youths, but individuals who voluntarily hurry from factory or home in the evening to get this additional training? On a comparable basis, we should have over a million young people active in the three divisions of our Victory Corps.

I remember spending one evening visiting all the pre-service Corps in a medium-size English city. I saw the Sea Cadets carrying on their program in a high-school building where the gymnasium became the "deck" and a classroom the "bridge." I saw the Army Cadets drilling smartly behind their own band. I saw several units of the Air Training Corps whose best students went

¹Mr. Redefers returned in June, 1943, from a six-week journey to England and Scotland where he served as consultant to the Office of War Information. His trip was sponsored by the Ministry of Information of the British Government. Mr. Redefers is now a Major in the U. S. Army.

²Figures taken from the Report of the Board of Education, March 16, 1943.

to a "graduate" school located in a large home that had been turned over to the Air Corps for its exclusive use. Here the Wing Commander and his staff took me into various class groups where advanced work in navigation, communication, and the like was being carried on. This "Advance School" was well equipped with models made by staff members out of varied odds and ends. An old World War I plane stood in the garden.

To correspond with these service groups for boys, England has set up corresponding units for the girls who insisted that they be given a chance to share in the war. About 130,000 girls are now enrolled in the National Association of Girls' Training Corps which was initiated early in 1942. This N. A. G. T. C. includes the Girls' National Training Corps (a junior WAC) and the Women's Junior Air Corps (a junior WAAFS). These pre-service groups aim to develop physical fitness, a trained sense of responsibility, and the power to carry on in time of danger or emergency. Girl cadets take courses in first-aid, medical-orderly work, household hygiene, bookkeeping and typing, and many other subjects, depending upon the abilities and experience of the volunteer staff. Sometimes these Corps will assist in the planting and harvesting of crops or in community services, although opportunities for such community work are still too limited.

THE UNITS AT WORK

I visited many of these units. Like the Cadet Corps for boys, they meet two evenings a week and on Sundays. Each corps has its distinctive uniform, but the girls must pay a small fee for their uniforms and sacrifice precious coupons to obtain them. This causes some feeling of injustice. These groups drill very well. In fact, drilling is one of the most popular activities among the girls who spend the working day in factories, shops, or stores. Many girl cadets, upon reaching the required age, join up with one of the senior forces for women.

Comparable to the Land Division of our High School Victory Corps, England has a Women's Land Army and a number of less well-organized groups operating on a volunteer basis. Volunteer Land Clubs are springing up in many centers, and young people are sacrificing their holidays to help farmers in the immediate vicinity. One of the pioneer groups is the Altrincham Land Club whose members give the money they earn from farm labor to various national charities. The government is urging factory workers and clerks to spend their vacations on farms and promise them extra coupons for performing this national service. When I left England in June, city squares were placarded with signs urging people to do vacation farm work.

The youth in English schools also help in feeding the nation. No school is complete without its victory garden for which playing fields and lawns have been sacrificed. School children also go out to the farms during the berry season, the potato season, or to thin the turnips. A maximum of twenty meetings

may be skipped from school attendance to do agricultural work, and more time can be taken from the school year if His Majesty's School Inspectors approve. Work on the farm is adjusted to the children's ability, and parent consent is necessary for this activity. Most of such work is made possible through direct negotiation between an individual farmer and a school, or between a farmer and a class teacher. Distances in England are small, and schools are relatively near the farms so that the situation in England can hardly be compared to ours.

No comprehensive figures were available on the number of schools and children that are participating in farm work. Last year in Cheshire, over 3,000 children were employed on farms. There was a similar number in Gloucestershire and Shropshire, and even more in Wiltshire. One school in Dartington alone dealt with over 1,000 tons of produce, while in Warwickshire it is estimated that school children brought in over 30,000 tons of produce.

During the holidays, it is common for school groups to go to agricultural camps that have been established by the government. There they work on farms where the labor shortage cannot be met through the local labor supply or through volunteer methods. Six hundred and fifty of these camps for youth were maintained by the government last year, and 31,000 youth attended them. The impression I gained was that nationally more is being done in England than in the United States to see that young people assist in the farm labor shortage.

ENGLAND'S OTHER PROGRAMS

Besides these "official" and "semi-official" organizations, England has its Boy Scouts, Girl Guides, Boys' and Girls' Clubs, whose programs are all directed toward war services in one form or another. Many of these organizations, older than the pre-service groups, are resentful that in the war emergency these established agencies were overlooked and new organizations set up with semi-official backing. Perhaps the government had no choice, for in the early days of the war when blackouts and upset family conditions threatened to cause a sharp rise in juvenile delinquency, many established clubs had lost their leaders to the war, and their financial resources were severely strained. It was undoubtedly difficult to make changes within these groups that had crystallized and established programs.

On the Home Front, England has nothing comparable to the Community Services Division of our High School Victory Corps. Like American young people, English youth are participating in salvage drives, war bond sales, and other similar activities. By and large, English schools are not as close to their communities as our schools are, nor does the curriculum reflect community needs. The problem that both England and the United States face in the war services of youth is the organization of our communities in such a way that young people may serve in ways that seem important to them. England, except

in agriculture, is not meeting this problem. I recall that one group of WJAC'S offered their services to a local unit of Women's Voluntary Service and they were given the task of mending clothes and darning socks. Important as these tasks may have been, the psychological reaction among the girls was negative.

What will be the future of England's youth program? What will happen to these pre-service corps when the war is over? In what direction will these marching, drilling young people go when the war is won? No one seems to know. Many are puzzled, for there is a growing recognition that these youth groups are meeting a real need and some postwar program must take their place. A Wing Commander of the Air Cadets said, "We'll go straight on just as we are now." A leader of a girls' group confessed her bewilderment when she said, "I don't know. The girls like to drill most of all. German youth liked to drill and look what they marched into." The answer for both England and America centers around the development of a Victory Program for winning both the war and the peace. There is much to be done. Will we allow our young people to help us plan and participate in creating the postwar world?

The President Is Honored

AT THE fifty-ninth annual meeting of the New York State Association of Secondary-School Principals, held at Syracuse, New York, on December 28-29, 1943, Dr. Hugh H. Stewart, President of the National Association of Secondary-School Principals was presented with an illuminated leather-bound testimonial, which contained these resolutions:

TO ALL TO WHOM THESE PRESENTS MAY COME, GREETING:

WHEREAS, DR. HUGH H. STEWART has served the New York State Association of Secondary-School Principals for many years as a loyal member and a dynamic leader, having been chairman of the College Relations Committee, member of the Committee on Readjustment of Secondary Education, member of the Executive Committee, and vice-president and president of the Association, and

WHEREAS, in recognition of his achievements in secondary education and his high qualities of efficient leadership, he has been elected president of the National Association of Secondary-School Principals, the first principal from New York State to occupy that distinguished position,

Be It Resolved, That the New York State Association of Secondary-School Principals recognize and acknowledge this signal honor which Dr. Stewart has brought to our state and to our association; and be it further

Resolved, That we felicitate him on his achievements, and extend to him

our best wishes for a successful administration of this high office; and be it further

Resolved, That these sentiments in enduring form be presented to Dr. Hugh H. Stewart not only as a memento of our fraternal esteem and as a testimonial of our respect for his ability and integrity, but also as an evidence of our appreciation of the high value of his service to New York State and to the nation.

Given under these our hands and seals on this the twenty-eighth day of December in the year of our Lord one thousand nine hundred and forty-three.

National Contests Approved

SCHOOL ADMINISTRATORS can strengthen their control over pressures to engage in national contests as described by the National Contest Committee by considering only national contests that have been placed on the list below. This professional service is rendered by the NATIONAL CONTEST COMMITTEE at the urgent request of the membership of the Association. The Committee outlines its aims, purposes, and recommendations in reports that have been published in THE BULLETIN. You are advised to read the last complete report of the Committee.—*How Should Schools Control Contests, Tournaments, and Festivals?*—found in the October, 1943, issue of THE BULLETIN, (pp. 134-139). A reprint of this report is available free on request.

National Contests

*Approved for the School Year 1943-44 by the
National Contest Committee of the
National Association of Secondary-School Principals*

1. Essay, Poetry, and Story Contest for Students sponsored by the Atlantic Monthly magazine, 8 Arlington, Boston, Massachusetts.
2. National High School Art, Music, and Literature contest sponsored by *Scholastic Magazine*, 220 East 42nd Street, New York 17, New York.
3. National Oratorical Contest sponsored by the American Legion, Indianapolis, Indiana.
4. The National Student Essay Contest on World Organization sponsored by the League of Nations Association, 8 West 40th Street, New York 18, New York.
5. Ninth Annual National High School Competition in Art sponsored by the Kansas City Art Institute, 4415 Warwick Boulevard, Kansas City 2, Missouri.
6. Science Talent Search sponsored by Science Service, 1719 N Street, N. W. Washington 6, D. C.

News Notes

CHILD LABOR INCREASES—The second year of the War has brought a phenomenal increase in the number of minors 12 to 18 years who are employed, according to the Annual Report of the National Child Labor Committee issued by Mrs. Gertrude Folks Zimand, General Secretary of the organization. "In many communities," the Report states, "there have been increases of 500 to 700 per cent or more in the number of working children. No one knows the exact number, but it is estimated that 4,000,000 children were at work last summer in industry and agriculture and at least 3,000,000 are employed now, of whom about 750,000 are children under 16 years.

"In three-fourths of the states children may leave school for work at 14 years and many thousands have done so. Others work before and after school hours, week-ends, or during vacation periods. Children are engaging in every conceivable kind of employment—much of it work formerly done by adults and frequently unsuitable for young workers. Long hours and late night work are common. By and large, the child workers of today are well paid, many of them too well paid. Boys of 14 can make from 50 to 75 cents an hour; 16-year-olds can command \$40 to \$70 a week. Some youths on part-time jobs are reported to be earning more than their full-time teachers. "As long as jobs are plentiful and wages high," the Report continues, "there will be no reduction in this number."

OF YOUTH'S WAYWARDNESS—What communities are doing or consider doing to combat delinquency of youth caught in war's strains and stresses is shown in a random sampling of reports from newspapers. The ideas listed below have been found successful.

Youth expeditors (Detroit), representing the Board of Education and Council of Social Agencies, work with youth in each neighborhood, discovering youth needs and trouble spots. They organize adult groups to set up the required corrective programs.

American Coast Patrol (Philadelphia) "Catches 'em young," and shows wayward youth that it is much more fun to learn the ways of a sailor and mariner than to be a member of a street gang. A. C. P. is under police supervision.

"Teen Town" (Columbia, Missouri) is a hall or club, managed by youth. Open at various hours for various age levels "Teen Towns" are complete with snack bar, game rooms, and dancing facilities.

TYPES OF SECONDARY EDUCATION IN ENGLAND—To give the necessary setting for the "Grammar" school, the Norwood Committee reviewed the organization of secondary education in general. It advocates three types of secondary education—secondary Grammar, secondary Technical and secondary Modern—and that each type should have parity of amenities and conditions. Parity of esteem will be won by the schools themselves. In considering whether the three types of school should occupy separate buildings or whether there are circumstances which permit of one type of school being combined with another in the same building, the Committee remarks, "The phrase 'multilateral school' has been used in the evidence offered to us orally and in writing. It is a phrase which few witnesses have used in the same sense. . . ." "We would observe that the Junior Technical School has in the past owed its success to its very close association with local industry; such schools have been staffed by men who were in touch with local needs and sensitive to each change in the industrial requirements of the moment. Nothing should interfere with that relationship, and it is very doubtful whether it could be maintained unless the Technical School were free to direct its own destiny. "Apart, however, from the Technical School a two-type school combining Grammar and Modern School seems to be satisfactory in cer-

tain circumstances. . . . "We envisage therefore that . . . experiment will be made with a two-type school."

In a section of the Report headed "The Secondary School," the following appears: "In assuming a lower school of 11 to 13 in the Technical School, we are suggesting that the Technical School of the future should undertake a responsibility which has not been borne by the Junior Technical School of the past. But we think the change desirable if the Technical School is to gain a fair share of able recruits and if it is to develop the general education of a kind suitable for technical pupils. For in our view the Technical School should give a general education oriented no doubt from the age of 13 + towards the special technical course which it offers, but broad in conception; and it should provide also the corporate life and activities which are equally necessary for its pupils. Admittedly such a development would carry implications as regards buildings and staff. But without such development we do not see how technical education in this country can attract and cater for pupils in sufficient number, or equip them properly to take their place in industry and commerce and as citizens in the community. The function of the secondary Technical School should be primarily to give a training for entry into industry and commerce at the age 16+ to meet the demands of local industrial conditions, and wherever possible and expedient to offer facilities for advanced work from 16 to 18. At present such work is often best carried out in Technical Colleges, with which Junior Technical Schools frequently maintain close relations. From our point of view we feel it to be most important that a road to the technical faculties of the Universities should be open to all who can fully profit from University studies. For some pupils the path will lie through the advanced work in the secondary Technical School itself, for others through the Technical Colleges. . . ." "We may add that at present the Junior Technical School is free from external examination, and the Technical School of the future should be equally free."—*The Technical Journal*, Oct. 1943, the official organ of the Association of Teachers in English Technical Institutions.

SECOND WARTIME COMMENCEMENT MANUAL—For the third consecutive year the graduating season in America's schools will be observed with the nation at war. The *Second Wartime Commencement Manual*, prepared by the Division of Publications of the National Education Association, is designed to help schools in the development of 1944 graduation programs. This *Manual* contains summaries of forty-seven programs put on by schools throughout the country in 1943; complete scripts of four programs; and a list of recent conferences. 72 p. 50c. Address the National Education Association, 1201 Sixteenth Street, N. W., Washington 6, D. C.

THE MISSING GRADE—South Carolina is fighting for the establishing of a 12-grade school system. The South Carolina Education Association has gone on the record favoring capping the South Carolina 11-grade school program with a twelfth year. Says a Columbia (S.C.) *State* editorial: "However, that it is not just a question of adding a grade. That would be a slipshod, or camouflaged, way of meeting the situation. The entire school training from first grade through high school must be revised. To do otherwise would be wasting money—would be kidding ourselves, and education is no field in which to kid!"

AWARDS FOR RESEARCH—Pi Lambda Theta, National Association of Women in Education, announces two awards for research on Professional Problems of Women from the fund known as the Ella Victoria Dobbs Fellowship. These two awards of \$400 each are to be granted on or before September 15, 1944, for significant research studies in education. A study may be submitted by any individual

whether or not engaged at present in educational work, or by any chapter or group of members of Pi Lambda Theta. An unpublished study on any aspect of the professional problems of women may be submitted. No study granted an award shall become the property of Pi Lambda Theta, nor shall Pi Lambda Theta in any way restrict the subsequent publication of a study for which an award is granted, except that Pi Lambda Theta shall have the privilege of inserting an introductory statement in the printed form of any study for which an award is made. Three copies of the final report of the completed research study shall be submitted to the Committee on Studies and Awards by August 1, 1944. Information concerning the awards and the form in which the final report shall be prepared will be furnished upon request. All inquiries should be addressed to the chairman of the Committee on Studies and Awards.

NEW SOUND FILM ON SCHOOL EQUIPMENT—How adequate schools, adequately equipped, and better paid teachers bring a dollar and cents return to community, state and nation, is the theme of a new sound motion picture, *Where Dollars Make Sense*. Production of this motion picture has been assigned to The Jam Handy Organization, Detroit, Mich., by its sponsors—The National School Service Institute of Chicago. Upon completion, prints or copies in 16-mm. will be made available for showings before special groups, including PTA, business men's and business women's clubs and organizations, tax-payers, and civic groups. The picture dramatizes the new and growing needs of schools to provide the kind of education the community must have to meet the new demands inevitable in the postwar world.

FORTUNE'S WOMEN—WILL THEY BE TEACHERS?—In a poll, claiming to represent the opinions of 17,000,000 women between the ages of 20 and 35, *Fortune Magazine* discovered that not very many of these women prefer teaching as their career. Only 6.8 percent of all women interviewed named teaching as their preferred occupation. On the other hand, 17.8 percent of the college-trained women named teaching. Here is what *Fortune* asked and what the women replied: "If you had your choice, what kind of work would you like to do?"

	All Women	Grammar school only	Business or trade school	Attended college
Office or Clerical	25.0%	15.1%	43.7%	14.5%
Factory	12.2	37.4	2.8	0.6
Nursing	9.5	8.2	8.8	4.2
Civil Service	9.4	5.3	12.6	7.5
Professional or Executive	9.0	1.6	7.7	21.1
Arts (theatre, music, etc.) ..	7.0	0.6	5.2	13.4
Teaching	6.8	1.3	2.8	17.8
Sales	3.9	5.3	1.7	0.9
Personal Service	3.5	13.2	0.3	0.5
Other	14.2	12.6	14.4	19.5

CHILD LABOR MANIFESTO—War exacts a heavy price from children. In the United States our children have so far been spared the terrors of bombing and invasion and the horror of starvation. But our children have not been untouched—many are living in strange and new communities under crowded conditions—many are neglected because of the absence of mothers on war jobs—some are already orphaned as war casualties mount. Other children are burdened prematurely with work too heavy for their strength—thousands are laying aside their school books to take full-time jobs.

- We believe that the demands for war production and essential civilian services can be met without exploiting children;
- We believe that children can contribute to the life of their communities in many useful ways, but that it is a short-sighted policy to employ them at hours or under conditions which threaten their physical development and impair their educational opportunities;
- We believe that the protection of children from harmful child labor is a community enterprise of first importance dependent upon the cooperation of parents, employers, schools and other community agencies.

Therefore:

- We call upon young people to resist the lure of war wages and to remember that temporary financial gain cannot offset future educational handicaps, and we urge parents to support this view;
 - We commend the efforts of all socially minded citizens to keep children from leaving school and to prevent their excessive employment outside of school hours;
 - We urge schools, wherever this is desirable, to develop in cooperation with employers and community agencies well-balanced programs of school and supervised part-time work;
 - We urge legislators and government officials to refuse to allow child labor laws to be broken down and to maintain sufficient staffs for their enforcement;
 - We call upon all of the forces in the community—the home, the school, the church, industry and commerce, labor, social and civic agencies—to unite in protecting our children.
- For further information write to the National Child Labor Committee, 419 4th Ave., New York City. *Community Action on Child Labor* contains suggestions for activities for local organizations.

BROTHERHOOD WEEK IN WARTIME—Brotherhood is not a luxury but a necessity. Especially in wartime. It is not the deliberate assumption, on the ground of duty or of expediency, of an attitude of kindness toward those not of our own circle, whom naturally we might distrust or dislike. It is rather the recognition of the true relationship of man to his fellowman, obedience to the law of man's being. The brotherhood of man is a corollary and consequence of the Fatherhood of God. All men are brothers one of another because all are children of God. For men of different races, nations or religions to treat one another as brothers is to live in accord with the nature of man as God has created him. To live otherwise is contrary to nature and carries with it the penalties that are attached to such dereliction. To deny brotherhood is to deny God. Brotherhood does not necessarily demand liking or fondness. That depends upon sentiments, often complex and always personal, that are beyond our control. Liking or fondness depend upon temperament but the practice of brotherhood rests upon the will. Brotherhood always requires the effort to understand our fellow. It always demands justice in our relations with him. It always calls for respect for human personality.

The essence of brotherhood is a willingness to give to other men every right and dignity we want to keep for ourselves. This elevates it from the level of sentiment into that of purpose and action. Brotherhood, so conceived, is essential to the fulfillment of our democratic ideals in America. It is essential, also, in the world, if we are to have a just and lasting peace. To perpetuate unnatural attitudes of intolerance, animosity, contempt and hatred is to keep

men divided and hostile. Peace cannot be built on it. The dearth of brotherhood brought on this war. Only the practice of brotherhood between nations and within nations can make wars to cease. This is the teaching of religion, and statesmen are coming to see it and to teach it, too. A triumph of armed might, a rearrangement of national boundaries, even the organization of an association of nations will not, singly or together, guarantee a durable peace. But brotherhood will do it. Nothing else will do it. How much more havoc must man work before he learns it?

The theme of the annual observance of Brotherhood Week, February 20-26, 1944, is "Brotherhood or Chaos—History Shall Not Repeat Itself." 3,000 communities in the United States participated in the 1943 observance, with schools and colleges taking a conspicuous part. Free program aids, including pageants, plays, posters, a movie, and outlines of other activities are available for this year's observance by writing the sponsoring agency, The National Conference of Christians and Jews, 381 Fourth Avenue, New York 16, New York.

The Comparative Toll Since Pearl Harbor

(As of November 15, 1943)

Casualties to U. S. Armed Forces since Pearl Harbor has been:

25,389 dead
35,805 injured
32,951 missing
26,820 imprisoned

120,965 total (Figures from OWI)

Casualties to American workers, on and off the job, have been:

88,000 dead
8,200,000 injured

(Figures from the National Safety Council)

Since Pearl Harbor, America's war production program has lost:

520,000,000 man-days through accidents to workers on the job
230,000,000 man-days through accidents to workers off the job

750,000,000 total man-days lost

These accidents represent lost time equivalent to the time required to build:

35,000 bombers or 108 battleships

TEXTBOOKS ON LATIN AMERICA—Are they fair? Are they prejudiced? The American Council on Education is about to release a study which will challenge nearly everything we have been teaching about Latin America, as well as the textbooks and other teaching tools used in elementary, secondary, and higher schools. The immediate effect of this study should be extensive revision of texts, motion pictures, visual aids, and other teaching devices on Latin America. Long-range effect should be better national relationships between the Americas. A study was financed by a \$35,000 grant from the Office of the Co-ordinator of Inter-American Affairs. Among principal recommendations of the American Council on Education, addressed primarily to writers and publishers of texts are these:

1. Publishers should submit manuscripts to qualified experts in the pertinent Latin-American field for criticisms.
2. Authors and editors of materials in this field should keep abreast of current publications so as to incorporate the latest and best information relating to the content.

3. Great care should be taken to guard against operation of prejudices and habits of thought. Guard against an attitude of condescension toward the people, of pessimism about their capacity for political and social progress. Avoid all of the pictures of Latin-America as a country rich in natural resources inhabited by a lazy people eagerly "waiting for Yankee energy to make it blossom like a rose."

4. Lay greater stress on cultural and social aspects.

5. Stress similarity between people of Latin America and those of the United States.

6. Improve the number and quality of visual aids. Large collections of illustrative material from the library of Congress, Pan American Union, and other sources should be utilized.

EDUCATION IS FOR ADULTS ONLY—What every school boy doesn't know is that he doesn't know very much—but where formal education ends, real wisdom begins, and the old grad becomes aware of his ignorance. He needn't blame himself, though, or his school for his failure to become educated, says Mortimer J. Adler, noted educator, in an article in the January, 1944 issue of *Coronet* magazine—because the very fact of youth is an obstacle to the pursuit of learning. The real truth of the matter is that education is the business of adults, the occupation, not of childhood, but of a whole life. Infantile and adolescent education are only the beginning of a substance to be acquired later by mature men and women. Because youth knows little of the pains of responsible judgment in all crises, because it lacks experience and is constantly subject to tides of coltish emotion, the voice of reason can penetrate its consciousness only slightly. What then, asks Professor Adler, can our schools and colleges accomplish, if they can't succeed in giving their charges a complete education?

According to Mr. Adler, modern education errs in two directions. It advances the importance of *making* a living over that of the *use* and *enjoyment* of the living we all must earn—and it attempts to give young people the fruits of learning without teaching them first how to climb the tree. The theory that children accumulated in school the knowledge that they're going to use later on in life is outmoded. . . . It forces children to swallow indigestible lumps of information that they can't possibly assimilate, thus burdening the memory and making no impression at all on the understanding. Far more telling is the method of instructing children in the *skills* of learning than that of burdening them with the learning itself. By this latter method the child can attain legitimately and comprehend more fully the fruits at the top of the tree of learning. And thus, concludes Professor Adler, schools must cease filling young minds with a jumble of miscellaneous information, or, according to the tenets of progressive education, attempting to inoculate children with false maturity. Concentration must be on the discipline of the mind, on the installation of learning skills. . . . So that children may learn in school the methods of becoming educated and so that they may as adults, after school, move on to the pursuit and acquisition of mature knowledge and wisdom.

TO ALL INTERESTED IN A STUDY OF EDUCATIONAL FILMS—To meet the numerous requests that are made by teachers and librarians for visual and biographical materials on various motion pictures which are suitable for photoplay appreciation study, Warner Bros. Pictures have established an Educational Bureau for schools, colleges, and libraries. Charles Side Steinberg, formerly Educational Director of the *Book-of-the-Month Club*, will be in charge of this program. Set up

on an institutional basis, the project is designed to make available to teachers practical teaching aids on appropriate motion pictures for study and discussion by classes, school literary and book clubs, school and college libraries, and other groups. Now in preparation are a series of aids to a forthcoming motion picture biography entitled *The Adventures of Mark Twain*. These will include a pictorial map of the America of Mark Twain's period, a photoplay and teaching guide to the film, bulletin posters on Mark Twain and his works, and other relevant materials. These teaching aids to *The Adventures of Mark Twain* could be used to stimulate a genuine interest in the life and works of this great American writer. All classroom and library material on educational films will be available upon request to Mr. Seinberg at Warner Bros. Pictures, 321 West 44th Street, New York City.

COLLEGE ENTRANCE EXAMINATIONS—George W. Mullins, Executive Secretary of the College Entrance Examination Board, 425 West 117th Street, New York 27, announced that at a recent meeting of the Board, the following dates were selected for the 1944-45 series of tests: *Saturday, December 2, 1944, Saturday April 7, 1945, Saturday, June 2, 1945, and Wednesday, September 5, 1945*. The tests to be offered at each of the series will be the same as those announced in the Bulletin of Information for 1943-1944.

NEW SOUND MOTION PICTURE IN PRODUCTION—How adequate schools, adequately equipped, and better paid teachers bring a dollar and cents return to community, state and nation, is the theme of a new sound motion picture, "Pop Rings the Bell." Production of this motion picture has been assigned to The Jam Handy Organization, Detroit, Mich., by its sponsors—The National School Service Institute. Upon completion, prints or copies in 16-mm. will be made available for showings before special groups including PTA, business men's and business women's clubs and organizations, and tax-payers and civic groups. The picture dramatizes the new and growing needs of schools to provide the kind of education the community and nation must have to meet the new demands inevitable in the postwar world.

EDUCATION MUST ADVANCE—The Indianapolis meeting of the Representative Assembly was one of the greatest in its history. The profession of education must go forward *now* on local, state, national, and international fronts or it will miss the greatest opportunity in its history. This was the conviction expressed again and again at the Indianapolis meeting. Here are some highlights of the Indianapolis meeting.

A determination that schools shall continue and increase their splendid service toward the winning of the war.

A determination that education shall have a voice in planning and preserving the peace.

A determination to secure Federal Aid *this year*, thus keeping the schools open and effective under state and local control.

A determination to meet the attacks on the American public school system and to establish it more firmly in the affections of the American people.

The Enthusiastic reports of achievement in connection with the NEA War and Peace Fund.

Committee reports indicating a great year of activity in the Association.

Plans to bring national, state, and local education associations into closer unity and co-operative effort so that the million teachers of the United States may play their full part in the nation's life.

The decision to seek a greatly increased NEA membership during 1943-44 and the development of plans to achieve definite membership goals.

The Book Column

Textbooks:

- AHERN, ELEANOR. *The Way We Wash Our Clothes*. New York: Silver Burdett. 1941. 140 pp. \$2.00. The ten chapters treat on old and new ways of washing, kinds of water, soaps, fibers and fabrics, stain removal, ironing and the laundry equipment, and planning, as well as the whole problem of the weekly wash.
- DE ALENCAR, JOSE. *Iracema*. New York: Longmans, Green. 1942. 160 pp. \$1.80. This is a romantic idyl of colonial Brazil—the story in Portuguese of the love of an Indian maiden for a Portuguese soldier who became one of the first settlers and founders of Clara in northeastern Brazil at the time when the Portuguese began the penetration and colonization of what came to be the greatest republic of South America. It also contains a complete vocabulary, occasional explanatory notes, and exercises on the most important topics of grammar, idioms, and conversation.
- ALLEN, W. C. *Cumulative Pupil Records*. New York: Bureau of Publication, Teachers College, Columbia Univ. 1943. 69 pp. \$1.25. A plan for staff study and improvement of cumulative pupil records in the secondary school, suggesting specific procedures and criteria for evaluation. It offers suggestions for use of record data and provides illustrations of how the records should be interpreted and used for guidance purposes.
- BAKER, L. N. *Wanted: Women in War Industry*. New York: Dutton. 1943. 215 pp. \$2.50. A picture of what the women war-worker may expect—how she gets her job, what it is like, what skill she needs, what she is paid, and problems encountered.
- BELL, F. J. *Condition Red*. New York: Longmans, Green. 1943. 274 pp. + 16 pages of pictures. \$3.00. The story of destroyer action in the South Pacific told by the Commander in charge of one of the ships. Here are tales of smashing blows at Guadalcanal, Tulagi, Gavutu, and Tanambogo, of torpedoed ships, of rescue work, of salvaging bombs and gasoline. It also contains the Odyssey of the Boise in the early months of the war when she patrolled the Indian Ocean and the Java Sea.
- BERLIN, M. K., NUNES, BELMIRE, AND FROMBERG, BENJAMIN. *Graphic Transcription*. New York: Gregg. 1943. 446 pp. \$1.50. This text of 80 assignments or "lessons" is graphic in the broad sense of the word and, also, is made literally graphic by some eighty original pen sketches that greatly enliven advanced shorthand and transcription study. To provide a broad and thorough transcription program, letters for the dictation material were obtained from sixteen different kinds of businesses and following each letter are thought questions on the content. Each assignment presents a shorthand vocabulary preview, a basic English principle with applications, letters for dictation, an unpunctuated letter, and a letter with information of interest to the consumer. It is an all-shorthand text that provides precise instruction for pupils who have just completed shorthand theory. *The Teacher's Handbook* contains detailed suggestions for using the text, a key to all shorthand copy, the solution of the unpunctuated letters, and the answers to all questions on the letters and articles. It also has new-matter dictation and transcription for each assignment.

- BERRY, L. V., and VAN DEN BARK, MELVIN. *The American Thesaurus of Slang*. New York: Thomas Y. Crowell. 1943. 1174 pp. \$5.00. This book is the result of ten years of work. There have been pioneer reference works in American speech and there are books on the subject published abroad, but nothing like a comprehensive collection of the sub-standard language has ever been put together. Such a book is unique. The authors have followed the same plan which underlies the famous *Roget's International Thesaurus*—words grouped by ideas, with a copious index. This has been scrupulously followed, so that one book actually complements the other. The slang words for "swing musician" are found under that head in Section 693. All the slang equivalents of the word, "news," are found under that word in Section 199. However, *The American Thesaurus of Slang* goes one important step further: where necessary it defines the words as well. Thus under the head, "stop," we find the slang synonyms "belay, can it, cheese it," etc., followed by terms requiring individual definitions—"flag, to detain; put on the binders, to apply the brakes."
- BRENNER, ANITA. *The Wind That Swept Mexico*. New York: Harper. 1943. 302 pp. \$3.75. This history of the Mexican Revolution from 1910 to 1942 is in narrative style told in complementary text and historical photographs. The first half of the volume is devoted to text and the other half in picture and caption sequence. It is the story of Diaz turning Mexico into a paradise for foreign capitalists and gathering around him a group of Mexican families who grew in wealth and lived in luxury while the other "90%" lived in serfdom and poverty. Then in 1910 came the rebellion and the succeeding years of uprising and the present regime and its war with the Axis.
- BROOKES, CAPT. BERNARD. *How to Fly an Airplane*. Chicago: Consolidated Book Publishers. 1943. 223 pp. \$1.00. Presents a basic understanding of flying to those who plan to take a student-flying course. The ten lessons, as well as the other chapters on parachutes, instruments, gliders and gliding, bombers and bombardiers, are written in conversational style and profusely illustrated with pictures and diagrams. Twelve pages are devoted to a definition of terms used around air fields.
- BROPHY, JOHN. *Spearhead*. New York: Harper. 1943. 277 pp. \$2.50. A novel of the commandos—of grueling months of rigorous testing and training and of drama-packed raids. The love plot is that of a young Irishman falling in love with his captain's sister.
- BROUGHTON, AVERELL. *Careers in Public Relations: The New Profession*. New York: Dutton. 1943. 255 pp. \$2.00. Explains the work in the field of Public Relations.
- BROWN, R. T. *Modern Latin Conversation*. Boston: D. C. Heath. 1943. 58 pp. 40c. Contains 18 lessons written in Latin as well as a Latin-English vocabulary. This should not only prove interesting in developing the art of Latin conversation but also prove useful as a basis for pleasant drill work in declension and conjugation forms and an effective aid to the student in Latin composition.
- BURK, J. N. *The Life and Works of Beethoven*. New York: Random House. 1943. 483 pp. \$2.75. A new account and interpretation of the life of Beethoven, and the most authentic classification of all his works for the guidance of concertgoers, radio listeners, and phonograph enthusiasts. The titanic personality of Beethoven, the man and the creator, emerges in all its humanity from the pages of this biography. The everyday events of his life and the ordeals

under which he wrote his majestic compositions are presented with the purpose of giving the general reader a faithful portrait. The principal works—more than one hundred—are separately analyzed.

- BURT, O. W. *Peter's Story Goes to Press*. New York: Henry Holt. 1943. 112 pp. \$2.00. An interesting story from beginning to end of how the newspaper is produced for the boy or girl in the upper elementary or high-school age.
- BUSONI, RAFAELLO, AND FISH, H. D. *Pegs of History*. New York: F. A. Stokes. 1943. 48 pp. \$2.00. Here are important world dates—twenty of them from the beginning of the Christian era to now—excitingly and interestingly told, dates on which world history hangs like a tapestry on so many pegs. Busoni has drawn for each date a beautiful and dramatic picture presenting the great characters connected with the date at this great moment of action; thus the date itself becomes pictorially interesting and memorable. Boys and girls will gain from this book not only an idea of the majestic pageant of history as "a common adventure of mankind," but a personal responsibility as makers of tomorrow's history.
- CAPPS, C. M., ed. *The Blue and the Gray*. Boston: Bruce Humphries. 1943. 281 pp. \$2.50. An anthology of the best poems of the Civil War.
- CHASE, STUART. *Where's the Money Coming From*. New York 18: Twentieth Century Fund. 1943. 179 pp. \$1.00. Two years of war have brought about an American miracle—production on a level even the optimistic scarcely dared dream. We now know definitely that when the war is over, America will have the resources, the plant, and the manpower for an age of abundance, for realization of those goals for America in food, shelter, clothing, health, and education. . . . But—*where's the money coming from?* That is the Number One worry of most Americans who are trying to look realistically into the future. The book presents the author's answer with all the incisive clarity for which he has long been famous. He explains money in terms of "the potato model," discusses the physical realities behind dollars and debts, and the means that exist for ensuring full employment through a "compensatory economy."
- CHILDERS, J. S. *War Eagles*. New York: D. Appleton-Century. 1943. 350 pp. \$3.75. The story of the American pilots in the famous Eagle Squadron of the RAF. It tells how they were trained, their part in the Dieppe raid, and many other instances. It tells of today's air-fighting on the Western Front and of the tactics and strategy behind this gigantic air war.
- CHOATE, FLORENCE, AND CURTIS, ELIZABETH. *The Fire Gold Sovereigns*. Philadelphia: F. A. Stokes. 1943. 207 pp. \$2.00. A story of Jefferson's times when American democracy was taking shape and becoming a reality. It is the story of Anne Farnsworth's experience during this period of time.
- CLARK, J. R., SMITH, R. R., AND SCHORLING, RALEIGH. *First-Year Algebra*. Yonkers: World Book. 1943. 466 pp. \$1.56. The book is backed by experimental work with students in the Springfield, Massachusetts, high schools. The publisher reports that teachers who used the text in its experimental form found that its presentation of algebra as generalized arithmetic removes much of the abstractness from the subject. It seems obvious that this presentation will be more understandable and concrete to students and by giving a correct first conception of algebra and its symbolism, will lead to a far firmer grasp of the subject as a whole. Its many new features are the timely inclusion of practical applications including aeronautics problems and illustrative material, pages to maintain the skills of arithmetic, and summaries and reviews.

CONGER, E. M. *American Warplanes*. New York: Henry Holt. 1943. 161 pp. \$2.00.

Profusely illustrated with photographs, here is a book about our country's fighting planes especially written for young people. In clear, simple language all of our famous planes are completely and interestingly described, both as to their makeup and to their use in famous air battles of the war. It is a book that will be read by elementary- and secondary-school pupils. It is a book that will be in great demand in any school library; in fact, in almost any library.

COOKE, D. C. *The Aircraft Annual*. New York: McBride. 1943. 288 pp. \$3.00.

With words and 180 photographs, this first annual describes the aircraft's part in today's world—in the Army, in the Navy, in transportation. It also tells of the Doolittle-Tokyo raid, the strategy of bombing, what's new in the air, the use of light planes, and miscellaneous activities. Written on the high-school reading level.

COOKE, D. C. *Young America's Aviation Annual: 1944*. New York: McBride. 1943.

224 pp. \$2.50. This fourth edition reflects the amazing growth of aviation. Text and pictures are the latest. Well illustrated with action pictures drawn from the official Army, Navy, and Air Corps collections.

COOKE, N. M., AND ORLEANS, J. B. *Mathematics Essential to Electricity and Radio*.

New York: McGraw-Hill. 1943. 418 pp. \$2.40. This book presents the essentials of secondary-school mathematics required for electricity and radio. Offering the technical content of both subjects side by side with the mathematics, it gives the student quick working knowledge of theory and applications. New topics are fully explained as they are approached, with examples given. Electrical and radio terms are clearly defined. Sample solutions are provided for each new group of exercises or problems. An especially understandable explanation is offered of Ohm's Law and Kirchhoff's Laws. Many problems apply each principle and illustrate each topic.

CRAWFORD, PHYLLIS. *Second Shift*. New York: Henry Holt. 1943. 211 pp. \$2.00.

The story of a girl who wanted to contribute to the war effort so she got a job in a plant making airplane parts—from four to midnight.

CUNNINGHAM, W. H., AND STAUFFER, R. M. *They Tell Their Story*. New York 17:

Harcourt, Brace. 1943. 280 pp. \$1.20. Contains 23 episodes or true stories which illustrate dramatically and inspiringly the courage, patriotism, and the dauntless resolution of those men and women who are fighting for the survival of a free world. For pupil use as reading or discussion material.

Current Events World Atlas. Chicago 5: Rand McNally. 1943. 52 pp. 25c. On

orders from schools calling for twenty-five or more copies, 20c. f.o.b., Chicago. Size of atlas, 11x16 inches. Contains 2 pages of pictures of U. S. Army and Navy insignia and 21 maps of countries of the world, as well as information on wonders of the world and a list of foreign geographical names in occasional use of principal world cities, and world factual information. Excellent for pupil use as well as adult use.

DANIEL HAWTHORNE. *Islands of the Pacific*. New York: G. P. Putnam's Sons.

1943. 228 pp. \$2.50. Here is factual data about the islands of the Pacific many of them familiar names to us as we follow the battle of the Pacific through the news, the radio, and even the more personal element, letters from our own boys. Beginning with Hawaii and the related islands of that group, the book follows in outline a great curve clockwise through the Pacific, ultimately reaching its farther side and returning *via* the Philip-

piners, Japan, and the Aleutians. The essential facts concerning location and physical appearance, climate, and topography, *fauna* and *flora*, peoples, languages, customs, government, and resources are all included. On reading the book, one probably for the first time gains a real appreciation of the distances involved not only in reaching these islands of the Pacific but more specifically in traveling from one island to its next-door neighbor.

DARINGER, H. F., AND SWEENEY, F. G. *Young America's English: Book Three*. (Books One and Two are for grades 7 and 8). Yonkers 5: World Book. 1943. 456 pp. \$1.40. The new ninth-grade English text offers fresh instructional materials that consistently recognize the immediate needs and interests of this age group. By skilled planning of experienced teachers, a natural learning environment is created and maintained. From beginning to end the units of work employ socially useful enterprises. The course makes use of language in real situations that boys and girls have need to understand—as consumers, as citizens concerned with the conservation of national resources in the world of books, radio, and motion pictures, and as responsible, friendly members of democratic America. The mastery of essential language skills and techniques, of facts and principles is fully provided for. There is systematic provision for growth in such major aims of language teaching as oral and written communication, creative expression, obtaining and organizing information, group co-operation, etc. Rules and techniques of English—grammar if you will—become truly functional as they are systematically taught, used, tested, and reviewed as part of the larger program.

DEMING, DOROTHY. *Penny Marsh and Ginger Lee, Wartime Nurses*. New York: Dodd, Mead. 1943. 236 pp. \$2.00. The story of two nurses, Ginger serving at Bataan, and Penny on the home front while her doctor husband is on duty in Australia.

DOUGLAS, J. S., AND SALZ, ALBERT. *He's in the Merchant Marine Now*. New York: Robert McBride. 1943. 224 pp. \$2.50. In the Maritime Service training stations thousands of merchant seamen are receiving shore training before going to sea. This book is an account of how these men are trained in wartime seamanship. High-school boys will want to read this book.

DRANEY, JOHN. *Diesel Locomotives*. Chicago 37: American Technical Society. 1943. 472 pp. + 220 illustrations. \$4.00. Here is a "how-to-do-it" book on the operation and maintenance of railway Diesel locomotives. The author is a man who has had years of experience and training. He was ably assisted in the writing of this new book by several men who are associated with railroads and Diesel locomotive manufacturing concerns. This new book is clearly written and indexed. It deals in the utmost detail with the Diesel engine in all its developments, with particular reference to its adaptation and use in railway transportation.

DUBOIS, J. H. *Plastics*. Enlarged and Revised, 2nd edition. Chicago 37: American Technical Society. 1943. 435 pp. + 203 illustrations and 50 tables. \$3.75. Since the first edition came from the press, gigantic strides have been made in the plastics industry, and, therefore, to bring the book up-to-date the author has added 144 entirely new pages. This new material covers the various types of synthetic rubber, low pressure laminating, trends and developments, and general properties and uses for molded plastics materials. Some minor changes were made in the older material. It explains in narrative and interesting form how various common materials and even waste

or by-products are put together to form the several plastics materials now available for use.

It gives an historical account of all plastics and traces the discoveries, developments, and experimentations. It omits formal chemistry, but explains what happens when various materials are handled in certain manners—the production of plastics. It stresses how *all* plastic materials are used, what can be made with them, where to use various kinds, which will withstand fire, which can be remelted, how to form them into commodities, required tooling, machining, etc. Thus the book is for the user of plastics and *not* the chemist or research laboratory. It has also been written for users of plastics who need basic design information, but cannot spend the time required for a detailed study of chemistry or the complex manufacturing problems of the molder or fabricator.

DUNN, MARSHALL, AND MORRISSETT, R. N. *America at Work Series: Machines for America*, 1943. 164 pp. 80c.; *Power for America*, 1943. 164 pp. 80c.; *Wings for America*, 1943. 244 pp. \$1.00. Characterized by both timeliness and a long-term perspective, this new series is a major contribution to today's curriculum for upper elementary or junior high-school grades. In smooth, straightforward style the three books of *America at Work* present concrete pictures of working America—our great industries, our rich sources of energy, our technological advances, and representative men and women at work.

This new series brings the modern working world into clearer perspective and increases the pupil's knowledge and understanding of the technical and scientific revolution through which we have been living. It views chiefly the working world of today, but treats also some of the major developments and discoveries of the past. It provides an overview of the varied opportunities open to youth for creative, co-operative endeavor in science, industry, and agriculture. Each of the three books deals with one big area or cross-sectional unit of our social and economic life. *Machines for America* deals with the work and value of machines, with their manufacture and their use in production, and with their place in our lives and in the life of our country. *Power for America* offers a simple yet full treatment of power makers, their historical development, principles of operation, sources of energy, and contributions to better living. *Wings for America* furnishes an overview of aviation, treating its development and the work of those who build, service, and fly airplanes in peace and in war, with a discussion of the global concept of geography.

FARGO, L. F. *Prairie Chautauqua*. New York: Dodd, Mead. 1943. 254 pp. \$2.00. While a story of teen-age girls, it reveals many authentic details familiar to those who have attended that genuine American institution—chautauqua.

FETRIDGE, LT. W. H., editor. *The Navy Reader*. Indianapolis: Bobbs-Merrill. 1943. 443 pp. \$3.75. This book, while prepared to help the new naval officers or enlisted men to understand the Navy better, is also a real source of information for the layman. It is what the editor calls "an anthology of the best writings on the U. S. Navy today." Its source is the nation's magazines, newspapers, and others. The book also contains many pictures, maps, and diagrams together with a glossary of Naval terms and definitions, and Annapolis Naval slang and reading suggestions. It is authentic information on our Navy which many high-school pupils will read.

- FOLLETT, HELEN. *Islands on Guard*. New York: Chas. Scribner's Sons. 1943. 170 pp. \$2.50. The story of the Pacific Ocean outposts. The author gives interesting glimpse of the history of the islands, of life on the islands during peace times as well as explanations of the part they play in the world situation.
- FOSTER, C. J. *This Rich World*. New York: McBride. 1943. 159 pp. + 15 pp. of pictures. \$2.00. A story of money from the ancient coins to the present-day debt and taxes. It explains not only the kinds but more particularly the process of exchange and its effect upon American economy. Good matter for the course in economics.
- FREEMAN, M. H., GOODFELLER, R. C. AND HANNA, J. M. *Practical Bookkeeping for Secretaries and General Office Workers*. New York: Gregg. 1943. 667 pp. \$1.84. When we discover a bookkeeping text that gives "more of the kind of training really needed to more of those who really need it," that should be news. Here is a vocational text that emphasizes a wide variety of the common, practical recording activities, rather than the more theoretical and specialized activities of the accountant. The study material and exercises represent the day-in and day-out duties of general office workers. Essential bookkeeping procedures are presented and reviewed repeatedly throughout the text; and arithmetic, handwriting, spelling, typewriting, office procedures, and business ethics are integrated with the bookkeeping skills. The book contains a profitable course of training for the prospective general office worker or secretary.
- FREILICH, AARON, SHONHOLT, H. H., AND SEIDLIN, JOSEPH. *Spherical Trigonometry*. New York: Silver Burdett. 1943. 140 pp. \$1.28. The book has been prepared to meet the present-day demands for a better knowledge of the earth as a sphere. The method is self-teaching; it has many illustrative examples; exercises are provided for pupils of varying needs, interests, and abilities; practical applications are made to navigation and astronomy; and cumulative reviews and historical materials are provided. Provision has been made for developing specific skills which will better fit the pupil to take his place in the various branches of the Armed Forces or in special industrial and vocational fields.
- Generalissimo Chiang Kai-Shek*. New York: John Day. 1943. 61 pp. \$1.25. Speeches and messages of the great leader of China from December 9, 1941, to November 17, 1942.
- GORDER, L. O., HATHAWAY, K. A., AND DUNLAP, C. H. *Fundamentals of Radio*. Chicago 37: American Technical Society. 1943. 373 pp. \$2.00. This new book is the fourth of a series of pre-induction textbooks prepared in co-operation with the United States Office of Education and the War Department. It has been written in a "how-to-do-it" manner. It will prove ideal for the pre-induction radio training of high-school students. In fact, it will prove of great value to anyone at all interested in the fundamentals of the subject. It contains 228 line drawings and photographs, numerous tables, a glossary of radio terms, and a series of electrical formulas. It is indexed and is bound in a durable cloth binding.
- For school work a student workbook (96 pp. 50c.) has been prepared, incorporating a 6-step plan of training developed through years of actual experience in the training of thousands of students. This workbook is especially useful now because of the drastic teacher shortage, for even a teacher without much previous experience in the subject can do an adequate job with the aid of the workbook simply by keeping one or two lessons ahead

of the class. It enables both teachers and pupils to achieve maximum efficiency with a minimum of time and effort. A set of answers is furnished to each teacher without cost.

GOSS, MADELEINE, AND SCHAUFFELER, R. H. *Brahms, the Master*. New York: Henry Holt. 1943. 351 pp. \$2.50. The story of Brahms' life written on the high-school reading level. It is a story of how Brahms in a busy, crowded life of practice made phenomenal musical progress.

HALL, C. G., AND MERKLE, R. A. *The Sky's the Limit*. New York: Funk and Wagnalls. 1943. 195 pp. \$2.00. Describes jobs in commercial aviation, training required, and how to get them.

HARRIS, C. O. *Slide Rule Simplified*. Chicago: American Technical Society. 1943. 266 pp. \$2.50; with slide rule, boxed, \$3.50. Here is a new "how-to-do-it" book which contains many pictorial views of the Slide Rule. Each illustration actually looks like a picture of the slide rule on which the various operations and points being discussed are clearly pointed out. The book will be helpful to people who want to use the slide rule only for common type calculations and for those who want to use it for all types including advanced mathematics. Pupils who have had no mathematics beyond the eighth grade will be able to learn from this practical book as it will show them how to do the common type calculations such as multiplication, division, square and square root, cube and cube root, etc., and combinations of these items. In fact, the first eight chapters are devoted to these common type calculations. For those people who want to learn how to use the Rule for advanced calculations, they can study the first eight chapters for refresher or review work and then from chapter nine on, they will learn how to employ it for the advanced work. All rules applying directly to the operation of the Rule itself have been streamlined and explained in such sequence that the reader or student is given the advantage of all accurate short cuts, as well as procedures which are followed in the same manner in all cases.

HARRISON, M. H. *Captain of the Andes*. New York: Richard R. Smith. 1943. 216 pp. \$3.00. The life of Jose de San Martin, liberator of Argentina, Chile, and Peru. The book traces his colorful career from his early childhood in the "Indian Paradise" on the banks of the Uruguay River which he left as a boy to accompany his parents to Spain. It tells of his school days in Madrid and follows him in the army of Spain. When news of the rebellion in South America reached him, he sailed to the New World to offer his service to Argentina, moulding order out of chaos, then achieved the conquest of Chile and broke the backbone of Spanish power. It tells of his meeting with Bolivar and of his death as a lonely wanderer in a forlorn French lodging house.

HERZOG, B. G., editor. *Cortez and the Conquest of Mexico*. New York: William R. Scott. 1942. 165 pp. \$2.50. An eye-witness narrative of Diaz, abridged and illustrated with 16th century Indian drawings of the conquest. It tells how a handful of Spaniards sailed from Cuba, landed on the Mexican coast, burned their boats, fought their way to the city of Mexico, captured it and its ruler, Montezuma, and secured for Spain the treasure of the Indies.

HETHERINGTON, JOHN. *Airborne Invasion*. New York: Duell, Sloan and Pearce. 1943. 178 pp. \$2.50. Here is the complete story of the Battle of Crete, one of the most precedent-breaking events in military history. It is a first-hand account of this terrible struggle, an account checked against official records. The

author tells in dramatic style of the struggle against great odds, how a mere handful of men fighting with a meager amount of equipment—and that far from the best—held out so bravely and heroically against lavishly supplied German troops. Mercilessly pounded from the air, these troops still defended the island. Then came the landings of German parachutists and the surprise reception they received from these defending troops—troops whom they were told were all killed by their incessant bombings—bombing that had met little resistance because there were only six or seven obsolete aircraft on the island. It is a tale of courage, of Nazi techniques, of war losses, and of evacuation but not defeated spirits. It is a wonder story—a story of how a commanding officer did so much with so little.

HIX, H. G., KINGSBURY, W. T., AND REED, T. G. *Towards a Better World*. New York: Charles Scribner's Sons. 1943. 500 pp. \$1.80. This book was developed and tried out thoroughly in the classroom with average ninth-grade pupils before publication. There was extensive consultation with representative educators in many parts of the country. It is a *functional book* with all of the essentials of our government woven into the subject matter in an alive and interesting manner. It has the students set up objectives periodically. It is concerned with the practical civics of organizing group meetings. A section on parliamentary procedure is included. It attacks the problem of how attitudes are created and developed, why they vary, and what proper attitudes should be and are in a democracy. It places continual emphasis on democracy. It shows how democracy is rooted in religion, and its influence and importance in modern living. There is discussion of how problems are solved by the scientific method, as well as a discussion of the stumbling blocks to critical thinking. There is also a chapter devoted to propaganda analysis. Five to ten key words are considered at the end of each chapter. These are italicized in the text so that they may be found easily, and considered readily in the context. There are extensive and carefully selected bibliographies, which present various points of view to satisfy the needs of each chapter.

HOLMES, H. N. *Out of the Test Tube*, 4th ed. New York: Emerson Books. 1943. 311 pp. \$3.00. The fascinating story of chemistry is told in one volume—its far-reaching influence on national defense, food, health, habits, jobs, environment, and the future. It begins with the earliest chemistry knowledge and the pioneers of science and traces its development to the work of the present-day laboratory.

HUGHES, RILEY. *Our Coast Guard Academy*. New York: Deven-Adair. 1944. This book is the third in the Deven-Adair Service Academy Series, and the first to be written about the famous New London school for Coast Guardsmen. The author, a member of the faculty at Providence College, has worked closely with Academy officials to produce an illustrated account of Coast Guard officer training that has complete official sanction. Ranking next to West Point and Annapolis, the Coast Guard Academy has received a tremendous impetus under wartime expansion and now turns out yearly a large contingent of reserve officers and SPAR officers, as well as regular graduates of the three-year accelerated course. The book describes the activities and requirements of each in detail. A separate chapter tells of the active part being played by the Coast Guard in the war all over the world—from Greenland to Guadalcanal.

ATTENTION SCHOOLS

**Enroll now in the National Association of
Student Councils**

**The National Association of Student Councils
of the
National Association of Secondary-School Principals
1201 Sixteenth Street, N. W.
Washington 6, D. C.**

APPLICATION FOR MEMBERSHIP

The Student Council of _____
Name of School

Address for *Student Life** _____
Street City or Town State

Name of Sponsor of Student Council _____

Address for *Student Life** _____
Street City or Town State

Annual rates of membership are based on size of school enrollment. Fee includes enrollment of Student Council of the school and faculty sponsor of Student Council.

L (large)—1,000 or larger	\$5.00
M (medium)—300 or less than 1,000	4.00
S (small)—Less than 300	3.00

Special membership offer. If your school enrolls now, membership will be paid up until June 30, 1945.

School Enrollment this year _____

Membership fee enclosed _____

*Monthly copies of *Student Life* will be sent the Student Council of the school and faculty sponsor of Student Council, as listed above, until June 30, 1945. **ENROLL NOW.**

Date _____ Principal _____

